

**BOYS' FLYING ADVENTURES**

**AUGUST**

# MODEL AIRPLANE NEWS



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# BOYS Learn FLYING From The Ground Up!

IF you are interested in flying, if the sight of an aeroplane looping and dipping over head gives you a thrill, if you love to go to the air fields to watch the landings and takeoffs and perhaps talk to the pilots and mechanics, who knows, perhaps some day you will be a Lindbergh or a Richard Evelyn Byrd.

But one thing is certain! You will never be a great flyer if you do not prepare yourself to seize the opportunity to get into the flying profession when it presents itself. As between the lad who knows the rudiments of flying and the one who does not, there is no question as to which gets the break when it comes. The young man who has prepared himself gets it every time.

## A Magnificent Ground Course in Flying

Until now it has been difficult to learn the rudiments of flying except through expensive text books and even more expensive schools. Literally thousands of boys who are tremendously eager to secure a good ground work in flying have been unable to do so on account of the expense.

And for those boys who, perhaps like yourself, would give or do almost anything to learn aviation, FLYING STORIES, the great Macfadden aviation magazine, has prepared what we believe to be the most complete, practical and easily understood ground course in flying that has ever been written.

It consists of eleven lessons as follows: History of Aviation, Theory of Flight; Controls, Construction, Operation, Training and Inspection; Navigation; Airplane Instruments; Airplane Design and Materials Used in Construction; Construction of Fuselage and Wings; Construction of Engine Mount, Empennage, Landing-Gear and Covering, Doping and Finishing of Airplanes; Carburetion, Ignition, Cooling, Lubrication of General Airplane Engines; Meteorology; Laws, Regulations, Airports and Airways.

Prepared by the Macfadden Aviation Advisory Board of which Captain Edwin T. Hamilton, ex-army flyer and instructor, is chairman it is, as you can see from the foregoing, a complete, comprehensive and practical preparatory course in flying which from any other source would cost perhaps hundreds of dollars to acquire.

## Published in Flying Stories

But to the readers of FLYING STORIES, except for the small cost of the magazine itself, it is absolutely free. Each month for eleven months beginning with the July issue one complete lesson, as above enumerated, will be published in this great aviation magazine.

Follow this course from month to month, study it hard, fit yourself to answer the examination questions at the end of each lesson and you will be prepared and ready to start actual flying when the chance comes.

The July issue of FLYING STORIES is on sale until July 23rd upon which date the August issue goes on sale. Therefore, do not wait, but hurry to the nearest news stand and ask for the July issue. If you are too late to get your copy take the August issue and write to FLYING STORIES, 1926 Broadway, New York regarding the first lesson.

## Other Thrilling Flying Features

In addition to the wonderful flying course herein described FLYING STORIES contains a wealth of flying material that will delight your heart, glorious fiction stories of the air, question and answer department, articles by famous flyers, amazing illustrations, everything necessary to keep you in closest touch with the most thrilling profession the world has ever seen.

In the adjoining column is a partial list of the contents of FLYING STORIES for August. Read it carefully, revel in its wealth of material and then get your copy without fail.

## Partial Contents of the August Issue

**Congo Cargo**

by J. M. Hoffman

**Gangsters of the Air**

by Royal Roussel

**The Sky Snare**

by Orrin Hollmer

**Cupid's Wings**

by Jerry Wentworth

**The Super-Ship (serial)**

by Guy Fowler

**No Man's Air (serial)**

by Capt. J. I. Lawrence

**My First Parachute Jump**

by Lady S. Mary Heath

**My Days and Nights in Flight**

by Elinor Smith

**The Mail Must Go**

by Jack Bell

and several more stirring air tales and aviation information.



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And then suggest that they subscribe for one year. The cost is very low—only \$1.50 for a whole year (twelve big issues). You will find subscriptions very easy to get. We want you to obtain at least five such subscriptions for us. *And you have until September 1st to do so.* After you have collected \$1.50 from five of your friends, you will have \$7.50 in all. Then send us the names and addresses together with \$5.00—and keep the other \$2.50 as your reward.

Think of all the parts or other things you can buy with this money. Perhaps you would rather send us the subscriptions one or two at a time as you get them instead of waiting until you get all five. This is perfectly agreeable to us. But you must send us the entire \$1.50 for each subscription. And then, at the end of the specified time (September 1st), if you have sent us five subscriptions, we will send you your \$2.50. If your efforts have produced less than five subscriptions, we will send you 30c for each one. So you see that no matter how many subscriptions you sell, you are sure to make money.

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Vol. 1

No. 2

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August, 1929

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### IN OUR NEXT ISSUE

CHAMPIONS OF CHIVALRY—A Thrilling War Story

PLANS FOR BUILDING A BERNARD MONOPLANE

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# WHERE to Learn to Fly



All schools found in this directory are recommended by the Macfadden Aviation Advisory Board and can be relied upon as being schools of high character and standards. No school is acceptable in these columns until it has passed the standards set by the Macfadden Aviation Advisory Board, and its advertisement here testifies to its high rating.

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WHEN a pupil enters high school or college, he knows before entering the subjects in which he is to be instructed. If not, he is given a list of those which that school offers and can make his own choice.

Unfortunately in many aviation schools throughout the country the pupil is told only that he will take their ground course, which will be followed by a flying course, from which he will be graduated a pilot. In other words, the pupil has no idea, nor is he given any, of the subjects he should demand from these various courses.

Our good aviation schools, on the other hand, give the pupil a complete list of the subjects covered in the various courses. They are glad to do so, as any school would be which offers a complete and correct course. But many schools do not and the pupil who enrolls in one of these is not aware until after entering that the subjects which he wished to study are not included in the course.

Many men do not know what they should expect of a good ground course until after they have been in the flying game for some time and later find that they are lacking in some essential part of the general knowledge necessary to be a well-rounded pilot or mechanic.

To correct this condition, at least among the readers of MODEL AIRPLANE NEWS, we give here the subjects which should have a place in all complete and thorough ground courses.

They are as follows:

1. History of aviation.
2. Dictionary and pronunciation of aeronautical terms and phrases.
3. Aerodynamics—
  - a. Simple.
  - b. Advanced.
4. Materials used in airplane construction.
5. Construction—
  - a. Fuselage.
  - b. Wings.
  - c. Lubrication.
  - d. Ignition.
  - e. Landing-gear.
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## NEW YORK

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  - b. Cooling.
  - c. Lubrication.
  - d. Ignition.
  - e. Carburetion.
10. Airplane design.
11. Meteorology—
  - a. Clouds.
  - b. Weather maps.
  - c. Forecasting.
12. The Compass.
13. Navigation—
  - a. General.
  - b. Course Plotting.
14. Airplane instruments.
15. Laws and regulations of the air.
16. Aerial photography.
17. Aerial mapping.
18. Airports and Airways.
19. Airplane sales.

The above subjects will fit the pupil for lessons in actual flight. The background he will have after mastering these subjects is a firm foundation for any position he may wish to prepare for as his life's vocation.

Nothing is more pitiful to see than a young man trying to hold down a job which is too big for him and, in most cases, it is too big for him simply because his training has not given him the proper foundation. No matter how beautiful the building, it endures just as long as its foundation will support it—no longer.

A close study of the subjects listed here will quickly prove the advisability of actual shop practise; for many of these subjects cannot be properly mastered in any other way. If a pupil finds that such a course is impossible for him to take and decides to study through correspondence, we strongly advise that after finishing such a course he apply for a job in an airplane factory, where actual work on planes can be had.

There are a few very fine courses in the United States which teach ground work by mail, but, as there are many which we consider worthless, we advise that you obtain a list of those we can safely recommend before investing your time and money.

We can recommend no schools which claim to teach flying by mail, as no man can learn to fly a plane in this way and it is only right that we protect our readers from schools which make these claims.

Before you invest—investigate!

## NEW YORK

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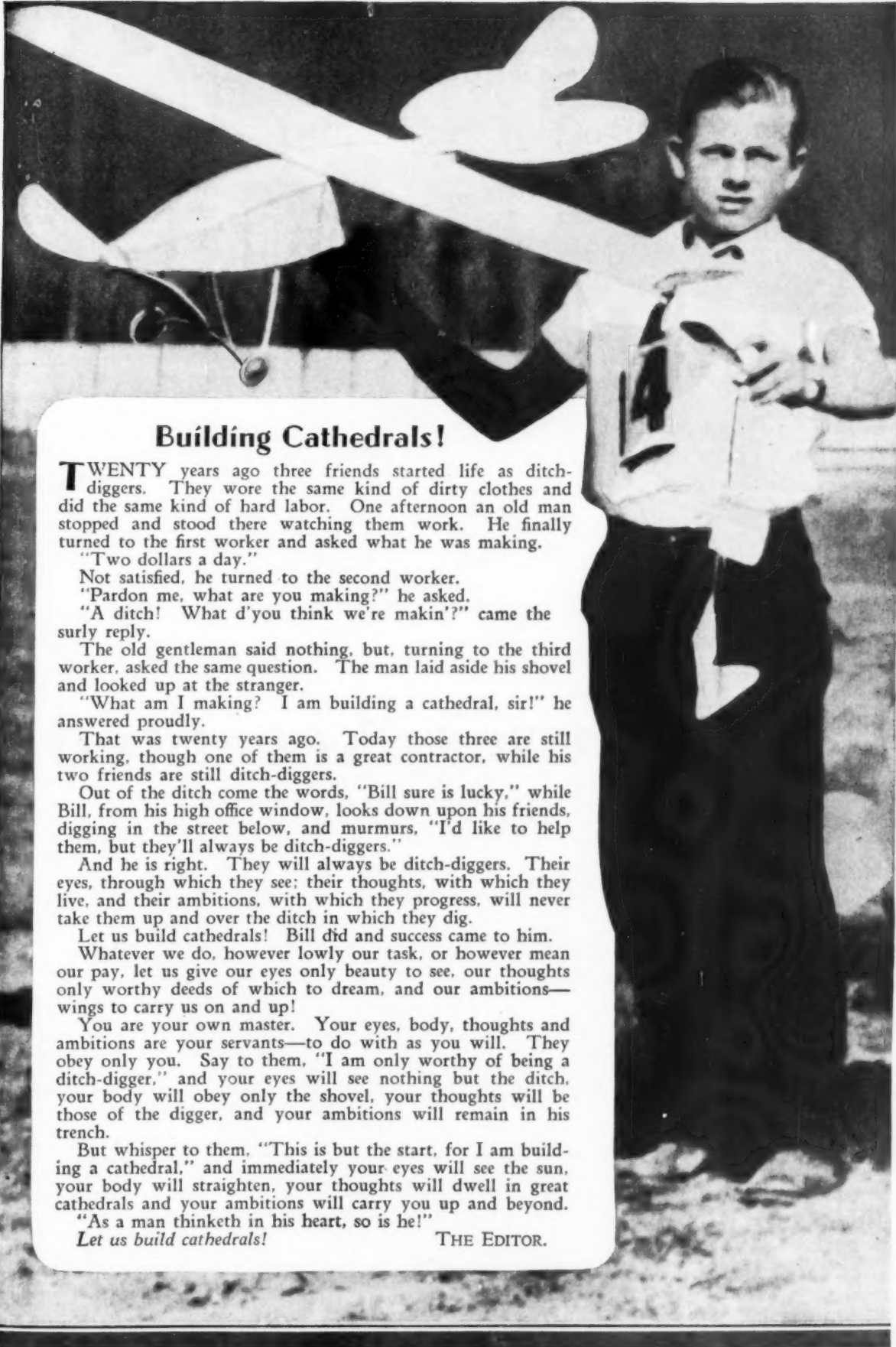
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## Building Cathedrals!

**T**WENTY years ago three friends started life as ditch-diggers. They wore the same kind of dirty clothes and did the same kind of hard labor. One afternoon an old man stopped and stood there watching them work. He finally turned to the first worker and asked what he was making.

"Two dollars a day."

Not satisfied, he turned to the second worker.

"Pardon me, what are you making?" he asked.

"A ditch! What d'you think we're makin'?" came the surly reply.

The old gentleman said nothing, but, turning to the third worker, asked the same question. The man laid aside his shovel and looked up at the stranger.

"What am I making? I am building a cathedral, sir!" he answered proudly.

That was twenty years ago. Today those three are still working, though one of them is a great contractor, while his two friends are still ditch-diggers.

Out of the ditch come the words, "Bill sure is lucky," while Bill, from his high office window, looks down upon his friends, digging in the street below, and murmurs, "I'd like to help them, but they'll always be ditch-diggers."

And he is right. They will always be ditch-diggers. Their eyes, through which they see; their thoughts, with which they live, and their ambitions, with which they progress, will never take them up and over the ditch in which they dig.

Let us build cathedrals! Bill did and success came to him.

Whatever we do, however lowly our task, or however mean our pay, let us give our eyes only beauty to see, our thoughts only worthy deeds of which to dream, and our ambitions—wings to carry us on and up!

You are your own master. Your eyes, body, thoughts and ambitions are your servants—to do with as you will. They obey only you. Say to them, "I am only worthy of being a ditch-digger," and your eyes will see nothing but the ditch, your body will obey only the shovel, your thoughts will be those of the digger, and your ambitions will remain in his trench.

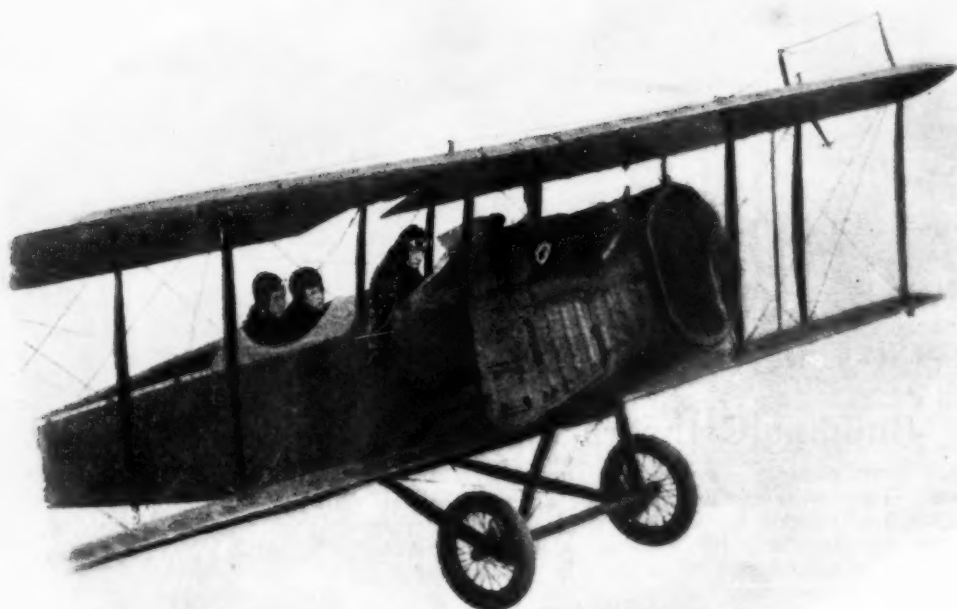
But whisper to them, "This is but the start, for I am building a cathedral," and immediately your eyes will see the sun, your body will straighten, your thoughts will dwell in great cathedrals and your ambitions will carry you up and beyond.

"As a man thinketh in his heart, so is he!"

*Let us build cathedrals!*

THE EDITOR.





"There! They've crashed!"

# No Excuses Accepted!

The Biggest Scoop of the Year was Five Thousand Feet

Below Them and No Place to Land.

The Star Reporter Gave Up the Attempt, but Curly—

"COPY boy!"

A nasal, imperious voice rasped above the clatter of typewriters in the editorial room. The owner of the voice, Alex Brown, star reporter of the *Evening Bulletin*, stopped punching the keyboard in front of him and looked about with annoyance. The copy boy was not in evidence. Brown raised his voice to a higher pitch.

"Copy boy!" He bellowed it this time as if the mere power of his lungs could penetrate the walls that seemed to be hiding the copy boy. A figure that had been bending over the files at the rear of the office came running.

"Here, take this," the reporter barked, "and keep on the job." The youth thus addressed, Ray Lawrence, known as "Curly," took the story that was thrust into

By  
LEON BYRNE

his hands. He paid no attention to the reporter's scowl, for his mind was concerned with something far more important than the scowls of Alex Brown.

For many days he had been steeling himself against the possibility of a more significant rebuff. Now, he had decided, was the time to do the thing. After all, the worst that gray-haired Jack Travis, city editor, could do would be to say, "No." Curly placed Brown's story in front of Travis.

"Mr. Travis," he began. Then he stopped. The convincing arguments he had so carefully prepared had fled his mind. Travis looked up quizzically from the stack of papers he had been reading.

"Well?" he said.

"I'd like a try at reporting," Curly blurted out. Travis' eyes twinkled, but his face remained immobile.

"Wouldn't you rather be city editor?" he asked with

# The Story of a Boy Who Knew What to Do and Had the Nerve to Do It

mock seriousness. Then, as the kindly but business-like man started to smile, Curly hurried on.

"I've been here a year now," he said, "and I've made it my business to study writing. I could hold down a job if you'd give me a try at it." Travis continued to smile.

"How old are you, Raymond?" he asked.

"Seventeen," Curly replied.

"You're a little young yet to become a Richard Harding Davis, aren't you?"

"I know I could hold down a job," Curly answered earnestly. He did know it, himself. Why wasn't he able to convince Travis, to tell him of his constant study of the *Bulletin's* files, his hours of writing in his spare time to develop a style?

"Reporters are made, not born, my boy," Travis said as he picked up Brown's story and glanced at it. Then, as Curly started away with solemn face, the city editor turned to him.

"Stay with it, Ray," he said, "and you'll get your chance. Right now, though, I'm afraid you're a little young."

"All right," Curly managed to say as he walked away. To be refused merely because of his youth was what he could not understand. What if he was young? He knew the game, he could—

"Copy boy." It was Brown again. He had eyed Curly as the latter conversed with Travis. Now he scowled. Brown apparently could not be happy about anything.

"You're to go out to the municipal airport with me this morning," he said. "You're to act as runner, and I want to see you tending to business."

That made the horizon a trifle brighter for Curly. The airport—that magic place where white-winged planes roared up into the heavens and away over the horizon, where men became birds.

Curly knew what the assignment was to be. A huge tri-motored, cabin plane was to swoop down on the Brighton field that morning, from the east, carrying a party of eastern capitalists. It was a transcontinental flight, with San

Francisco as the goal. The story was important.

Yesterday's paper had been full of it—big business; a manufacturing merger; the seven men in the party were trying to beat time. Brighton was to be one of their two stops between New York and California. They were important men and it was a big story. If the plane arrived on time the *Bulletin* could make the noon edition with it.

**C**URLY and Brown took a taxi to the field. Brown had his portable typewriter with him. As soon as he had gathered material for a first story he would dash it off in type and it was Curly's mission to speed back to the *Bulletin* with the copy. Brown would remain at the field to gather more details.

The giant liner was on time. Curly and the star reporter had no more than arrived at the crowded field when a silver speck glinted above the eastern skyline. In a second the drone of the three powerful motors was heard and, as reporters and photographers ran out onto the landing lane, the great bird settled down to earth.

Curly was close at Brown's heels as the latter hurried up to the cabin door. There was the usual "Glad to be here," "Having a wonderful trip," "Aviation is the key to the future," from the travelers, and Brown, clutching a handful of scribbled notes, was racing back to the cab.

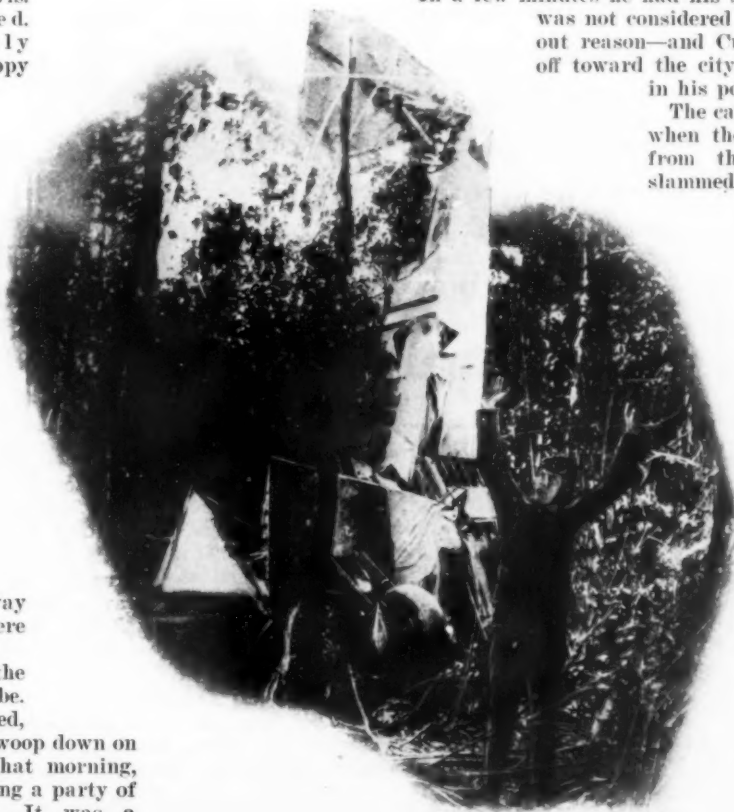
In a few minutes he had his story in shape—Brown was not considered a crack reporter without reason—and Curly was being rattled off toward the city with the copy tucked in his pocket.

The cab had just left the field when there was a loud report from the rear. The driver slammed on his brakes and jumped out.

"Flat tire," he said laconically. "I'll have it fixed in five minutes."

"Hurry," Curly pleaded, "because every minute counts." Another cab came racing down the road. As it whizzed by Curly recognized the occupant. It was Dick Rumel, aviation editor of the *Journal*, the *Bulletin's* competitor in the evening field. Curly shouted and waved his arms, but the cab sped on.

"You fellows aren't very accommodating to



each other, are you?" the driver remarked as he bent over the tire.

"No," Curly replied, "It seems to be every man for himself."

It was a few minutes after eleven when Curly raced into the *Bulletin* office and thrust the story into the hands of the city editor.

"What kept you?" Travis asked.

"The cab broke down," Curly replied.

Travis said nothing, but Curly realized the censure that had been implied. He knew all too well that one of the first laws of reporting is: "No excuses are accepted." However, when the presses started rolling off the noon edition, Brown's story occupied a prominent position on the front page. Travis seemed to have forgotten Curly's tardiness.

"That's good work you and Brown did, Ray," the city editor said as he picked up a copy of the first run, still warm and smelling of printer's ink. "If you work with Brown awhile you'll get some first-class training."

Curly did not say it, but he thought to himself that he didn't need to work with Brown. Not that he had any illusions about "knowing it all" already. He realized that it was initiative and resourcefulness rather than fine phraseology that a reporter needed.

He kept his peace, but a determination formed in his mind. He would show Travis, and Brown too, that a "kid" could be as good a reporter as any one else. Even Curly, however, did not know how soon he was to be given a chance to prove himself.

It was two o'clock when the news reached the office.

Curly remembered that because he had just glanced at the clock when he heard Travis' startled exclamation.

"What!" the city editor ejaculated, grasping the telephone into which he was speaking. The high note of excitement in his voice threw a sudden hush over the office. Travis had been talking to Brown when the phone rang. The latter, now leaning over the city desk, had come in with a follow-up story on the departure of the plane. The *New Era*, as the leviathan of the air was called, left at one o'clock, refueled, stocked with food and winged its way out into the west, straight into the heart of the Rockies.

A radio message had been received at the *Bulletin* tower saying, "*New Era* flying high . . . climbing . . . course due southwest." Travis had scribbled that in at the top of Brown's new story and had shot it off through the air tube to the composing room.

"That," he said, "finishes that." It apparently did not finish it, however. As Travis listened at the phone now he scrawled notes on a pad in front of him.

"Is that all you could get?" he barked. Then he banged down the receiver and shouted at Brown:

"The *New Era* has had engine trouble! She's probably down, maybe wrecked. The radio station just picked up a fragment of a message, 'Engines missing . . . can't climb . . . no place to land . . . we're—'"

"Did they indicate their location?" Brown asked.

"No, nothing to show where they were. An hour's flying, though, due southwest, would take them right up into the wilds beyond Bellaire. There's no possible place to land there that I know of and no habitations near, except for a few scattered ranches. Good grief! It'll take half a day to get a man up there from Bellaire and then he probably couldn't locate them if they are down."

THE office was in a hum of excitement. Brown flew to a telephone. Calls were sent out to towns along the route of the plane. For fifteen hectic minutes the wires hummed—to no avail. The only thing that could be ascertained was that the *New Era* had passed over Bellaire half an hour before it was last heard from. Then it had apparently disappeared from the face of the earth. Travis was becoming frenzied. He could get nowhere.

Suddenly an inspiration seized Curly. He started toward the city desk. Then he hesitated as Brown's contempt and Travis' apparent indifference recurred to his mind. But determination urged him on.

"Mr. Travis," he began.

"Don't bother me," Travis said, reaching for a telephone. Curly insisted on being heard.

"Why don't you send an airplane up there?" he said. Travis started to explode wrathfully. Then his hand paused in its reach for the phone and his eyes became

thoughtful. With a suddenness that startled Curly, he snapped his fingers and roared.

"Brown," he belted across the length of the room, "get down to the Brady Air Service as fast as a cab will take you. I'll have a fast plane waiting for you. Follow the course of the *New Era*. Get the story! If you make the final edition there's a bonus for you."

Brown needed no further instructions. As though a hurricane had

caught him in its sweep, he was gone from the office, the tails of his overcoat flapping behind him. Then Curly, surprised at his own temerity, made another suggestion to Travis.

"Maybe he'll need a runner," he said. That idea appeared fantastic to Travis. He saw no way in which Curly could possibly help. But Travis, despite his gruffness, was a good sport. He saw the appeal in Curly's eyes.

"All right, Ray," he laughed, "go ahead. I'll see that there's room for you in the plane." Curly literally flew out of the office, not stopping for either hat or coat. He came to the street just as Brown was clambering into a cab.

"I'm going with you," Curly shouted excitedly, attempting to climb in.

**"What's the matter?" he asked. "Are you scared?"**

**"A little bit," Curly answered.**

**"You're not going to fall," Brown said as though he were reassuring a very small boy.**

**"No," Curly replied, "I'm going to jump."**

**"What?" Brown's eyes popped open. Curly rose in his seat and started to climb out of the cockpit, but just then—**



"The heck you are," Brown replied, giving him a push. "Get out of the way."

"Travis sent me," Curly insisted.

"Well, get in then and stop holding up the parade," Brown growled. "What good can you be?" he asked angrily, as the cab sped away.

"Mr. Travis thought you might need me as a runner," Curly replied. Perhaps Travis hadn't thought that, but—

A trim, little monoplane waited with throbbing motor as they raced up to the runway. The pilot was already in the cockpit and an official of the company stood by with two folded parachutes in his hands.

"Put these on," he commanded. "It's dangerous country you're going into and it's better to be ready for an emergency. You'll have company up there," the man went on as the 'chutes were being strapped on. "Rummel of the *Journal* hopped

off in a plane not more than two minutes ago. This one's a little faster though and you ought to be able to catch him."

"Let's go then," Brown shouted as he and Curly climbed into the observer's seat. With a sudden rush of wind the engine was speeded up and the tiny plane roared down the lane.

Curly had not confided to Brown that he had never been up in an airplane before. He tried to appear unconcerned, but he could not quiet the rapid beating of his heart as the plane, dipping slightly when the wheels left the ground, zoomed upward from the field. The monoplane circled for a few hundred feet to gain altitude and then pointed its nose toward the west.

Brown glanced at his watch. It was just 2:30. He made a quick calculation. The *New Era* had traveled an hour before it sent out its abruptly terminated distress call. The monoplane should cover the same distance in 45 minutes. With luck they might locate the stricken plane by 3:15. Final edition time was 4 o'clock.



"No, I'm going to jump."

That meant at the most 45 minutes in which to cover the story and get it into the *Bulletin*.

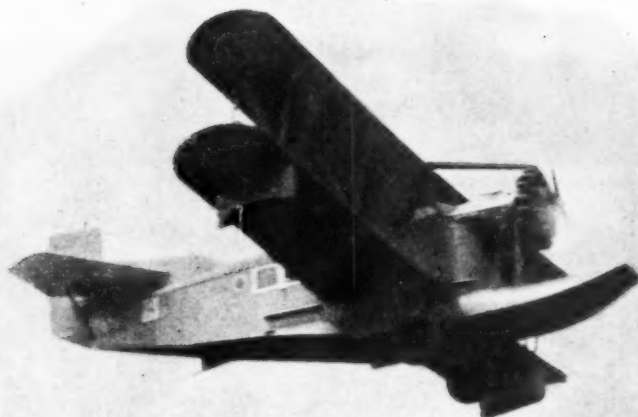
How the story could be covered Brown did not know. If the *New Era* had been unable to land safely the chances were against the monoplane's finding a safe spot. Perhaps they could see enough from the air to get—

"**B**ELLAIRE," the pilot shouted, pointing downward. Brown and Curly craned their necks over the side. The town lay far below them.

"Due southwest now," Brown shouted to the pilot. The latter, who had been given his instructions, nodded.

"Keep your eyes peeled," Brown admonished Curly needlessly. Curly's eyes were literally bulging open. The town was soon behind them and the terrain below was a desolate waste of rocks and lava. They were climbing steadily now and the peaks of the Rockies loomed through the blue afternoon haze in the distance. Brown's watch said ten minutes after 3. A speck in the sky far off to the south showed that the *Journal* plane was also keen on the hunt.

"He's too far to the south," (Continued on page 46)



# The Macfadden Sky Cadets

**What This National Organization of  
Model-airplane Builders Means to the Individual Boy  
and to the Nation at Large. How and Where to Join**

**T**HE greatest wealth of a country is in the youth of the nation, and so long as that youth is healthy-minded and possesses clean, wholesome ideals we have every reason to feel confident of the future.

There are those who have maintained that the younger generation of today is a wild, harum-scarum lot, headed straight for destruction, but, while older heads have wrestled with the problem from without, it has solved itself from within—and an American boy named Charles Augustus Lindbergh has blazed the trail.

Somebody has said that "there is a divinity which shapes our ends"—and wholly unknown to anybody concerned that divinity was exercising its controlling power to the fullest extent on May 20th, 1927, when a lad who had been known to only those of the air service as "Lucky Lindy" waved good-by to those about him and set sail through the air across the Atlantic Ocean. For days there had been other and more famous flyers gathered at Mitchel Field, on Long Island, waiting for favorable flying conditions to embark on the same dangerous mission. Any one of those, given the same "breaks of the game," might have performed the same feat that Lindbergh did, so far as the physical and mechanical parts of the performance are concerned—but certainly no one of them would have displayed the strength of character to avoid the temptations which followed, have carried themselves in the same upright, dignified manner, and so firmly established themselves

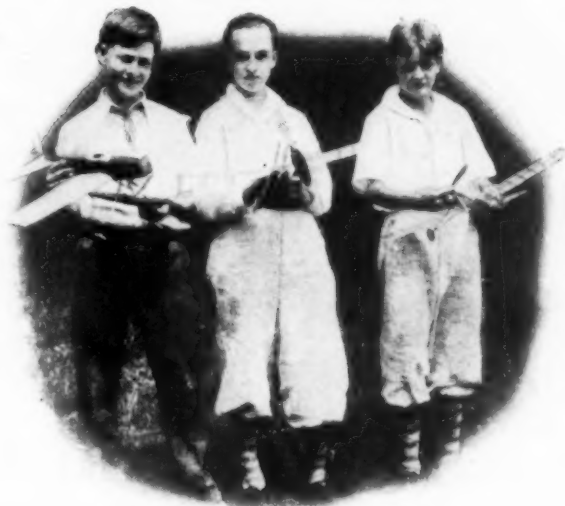
as the ideal of American boyhood in the way that Lindbergh has. It is in *this*—not in the mere performance of spanning the Atlantic Ocean through the air—that Lindbergh has performed a GREAT service for his country.

American boyhood *must* have its heroes; it demands them; and it has customarily selected them from the fields of sport, where the outstanding stars do not always possess the evenly balanced character or conduct themselves in the way that our American boyhood should emulate.

**S**EVERAL years ago Judge Landis explained to a friend why it was that he deserted the Bench to become the High Commissioner of Organized Baseball. He said:

"Do you know why I quit the Bench to go into baseball? I'll tell you why—it was because of American boyhood. Baseball stars have always been the heroes of the American boy, and when one of these stars commits an indecent or dishonorable act or fails to conduct himself as a gentleman and a sportsman an idol is shattered in the heart of American boyhood. There is no telling the far-reaching effect that this may have. I came into baseball to see to it that these idols of American boyhood conduct themselves as gentlemen and sportsmen both on and off the field of play, so that boyhood's ideals will not be destroyed. That's my job—and I consider it a more important duty than is given

North Plainfield Squadron Officers, (Left to Right) Charles Efinger, Squadron Commander; Newton Smalley II, Flight Commander; Douglas Valentine, Flight Commander



to any judge of any court in the land to perform."

And Judge Landis was right. But when Lindbergh flew across the Atlantic and then proceeded to avoid all the pitfalls of hero-worship and astound the whole world with his poise and strength of character a new idol was reared in the heart of American boyhood, which turned from its former heroes of the sporting field to the heroes of the air. And no cleaner, more manly ideal could have been given American boyhood to follow than when this mysterious "divinity which shapes our ends" picked Lindbergh as the one to accomplish the feat which so many were ready to attempt.

As a result of this, American boyhood has become what is now termed "air-minded," and last year 600,000 boys participated in model-airplane competitions in this country. Today model-airplane clubs and courses of instruction in the principles of aerodynamics are being organized in high schools, churches, colleges, boys'

clubs, and by chambers of commerce and Rotary and Kiwanis Clubs all over the country. In these model-airplane clubs boys build and fly their own model planes in competition with each other; they learn all the principles of aerodynamics without endangering their lives in the air, and, in this absorbing entertainment and manual training, they are beginning to forget the "gin parties" and "wild frolics" that so many older heads were contemplating with alarm. In fact, American boyhood has solved its own greatest problem.

Today this interest in model-airplane construction and flying is so wide-spread that there are over 100 large factories engaged in the making and selling of parts for model airplanes, and one department store in New York City alone sells over 700 model airplanes every week. In Los Angeles two boys, Oliver W. Young and Ralph E. Olson, who started to build model airplanes for their own entertainment, have branched out into the industry and now have their own factory in



Plainfield Squadron Officers, (Left to Right) Gordon Fountain, Squadron Commander; David Hamilton, Flight Commander; Lindbergh Flight; Carlisle Crane, Flight Commander; Bennett Flight; David Gildea, Flight Commander; Acosta Flight. All prize winners in recent contest



which they are building up a profitable business in the construction of model planes for the trade.

For the model airplane is something more than a toy—it is the basic foundation of what is destined to be the acceptable form of transportation for the commerce of the world in the not distant future. It is a primary education in one of the fastest growing industries of the world today. When such pioneers of air travel as the Wright Brothers, Curtiss and Dr. Langley point to the model plane as their start toward the building of their fortunes and reputations in aviation, one realizes what model building means. Dr. Langley never made a successful flight, but the principles of aeronautics which he gave to the world were gained only through the flying of models and these are followed by our aeronautical engineers of today, who pay tribute to the man by naming him "the father of aerodynamics."

Such is the knowledge of the transportation of the future that is gained through the building and flying of miniature models. The model-builder of today will be the "Ford of the air" of tomorrow.

To further the interests of this vast industry that is in the making, to help American boyhood keep clean and become so absorbed in whole-some outdoor entertainment that it

will avoid the pitfalls that hem in modern-day youth on all sides, Bernarr Macfadden, the "father of physical culture," has founded the MACFADDEN SKY CADETS as a national organization of model-airplane builders and flyers and has established the MODEL AIRPLANE NEWS to preach the gospel of this national as-

sociation and keep American boyhood clean and enterprising through the printed word.

As in all new movements of this sort, organization efforts have been purely local and, while various sec-

tions throughout the country have had their model-airplane clubs, there has been little progressive movement in the direction of organizing these existing clubs into one vast national association to work together for the good of all. This is what the MACFADDEN SKY CADETS will do. Any existing model-airplane club may come into the MACFADDEN SKY CADETS in a body and as a separate unit without losing its individuality, and each club will have its own voice in the councils of the national organization. Where there is no local club already formed but where there are those individuals who have an interest in this movement for the improvement and educational entertainment of its youth, the MACFADDEN SKY CADETS will send a representative who is familiar with all the angles of flying and who will travel in the SKY CADETS' own airplane to that town, city or neighborhood to do the organizing among the boys and to show them how to conduct their organization, though each club, or "flight," as these will be called, is to be under its own local commanders while receiving all



## JOIN the Sky Cadets

Here is a chance you have all been looking for! Form a club in your city of all air-minded boys and girls, who are interested in the building and flying of model airplanes, and then let the MACFADDEN SKY CADETS do the rest.

### WE SHOW YOU HOW!

If you already have a club formed that is not doing as well as you think it should—if it has less than fifty members—if it lacks enthusiasm—if you need instruction as to club activities—join the MACFADDEN SKY CADETS and leave the rest to us.

The MACFADDEN SKY CADETS are forming clubs all over the United States and Canada—in churches, schools and organizations of all types—for boys and girls who are air-minded, or wish to be.

Take part in the many national tournaments being held all over the country. Win prizes! Become a leader—a Squadron Commander—a Flight Commander, as thousands of Sky Cadets are doing!

Any boy or girl, or any group of boys or girls, or any club already formed, who wish the help of the MACFADDEN SKY CADETS, fill out the form below and we will gladly send all information necessary.

Full Name.....	Age.....
Address.....	
Have you a club already formed?..... Do you wish to form a club?..... How many can you interest in your city?..... Boys?..... Girls?.....	
Mail this to the Macfadden Sky Cadets, Macfadden Publications, 1926 Broadway, New York City.	

the benefits and aid that will accrue to it as a part of the national organization of MACFADDEN SKY CADETS.

Under the jurisdiction of the MACFADDEN SKY CADETS there will be local, sectional and national competitions between the various "flights," at which valuable prizes will be awarded and championships decided, to which

(Right) Plainfield girls, whose model airplanes compared favorably with those of the boys in the city's second annual tournament, are pictured above. They are, left to right—Marie Barrack, Roberta Neilson, Jane Bancroft, Dorothy Pearson, who won first prize for a hand-launched model and was awarded a silver cup, Carolyn Bancroft, Virginia Jenkins and Margaret Edwards

representatives of each local flight will be taken free of cost to them and to which they can fly in a *real* airplane, if they so desire and providing they have their parents' permission. Every member of each local "flight" will wear the insignia of the MACFADDEN SKY CADETS—the letters M. S. C. with wings attached, reproduced at top of certificate, p. 11; extra "wings" will be awarded to those who win them, exactly as they are in the *actual* air service.

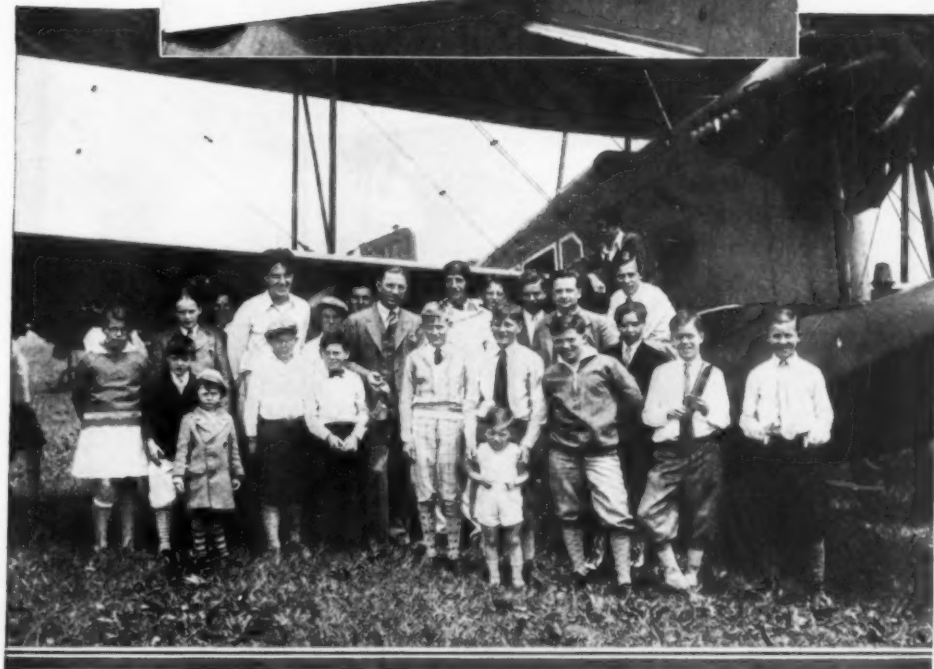
Plans and instructions for the building of model planes will be provided free; to those boys who wish to follow airplane construction or flying, either in the mechanical and engineering end or by actual piloting of a plane, all possible aid will be given and much advantage will accrue from the advances they will have made in this industry by what they have learned in the MACFADDEN SKY CADETS. Honors won in actual competition in (Cont'd on page 45)



(Right) Four members of the Macfadden Sky Cadets of Plainfield, New Jersey, about to take off in the Macfadden Air Yacht. Left to right — Louis Reichers, Pilot, John Dahl, Edward Hauptberg, Charles Underwood and Dick Phillips



(Below) a few of the members of the Macfadden Sky Cadets of Plainfield, New Jersey, gathered in front of the famous Macfadden Amphibian Air Yacht in which all of the Cadets were given rides in celebration of their entry into the club as members

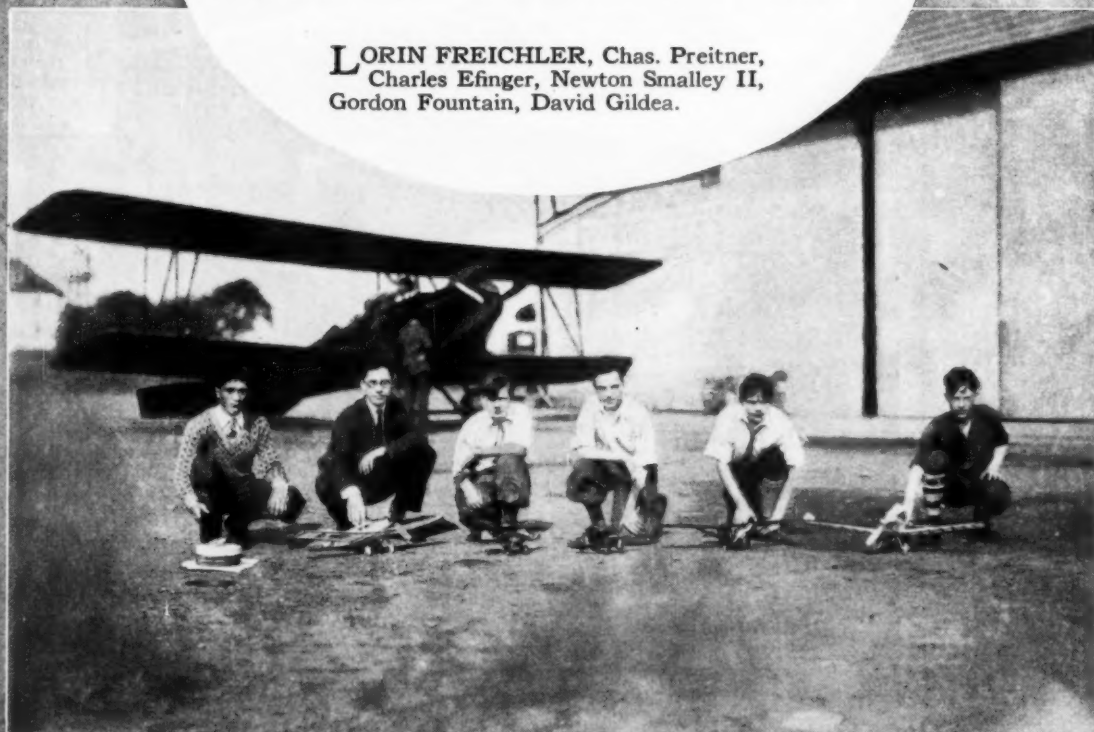




## A Few Macfadden Sky Cadets of Plainfield, N. J.

**DAVID HAMILTON**, winner of the unlimited hand-launched contest at the Plainfield meet, awaiting starting signal of Roy Schlenter, Plainfield Recreational Director.

**LORIN FREICHLER**, Chas. Preitner,  
Charles Efinger, Newton Smalley II,  
Gordon Fountain, David Gildea.







# How to Build a Curtiss Hawk Pursuit Airplane Model

Here Is a Scale Flying Model of a  
Famous Army Air Service Pursuit Plane  
Complete Instructions, Diagrams, and Full Scale Assembling  
Layouts Are Contained in This Article

**T**HE Curtiss Hawk, a military type of fast pursuit plane used in the Army Air Service, makes a wonderful model when built to scale. As this model can be made at very little expense by the amateur model builder, it makes an interesting and educational study of an airplane of this type. We have retained as many of the features of the real plane as could be practically used, keeping in appearance and form most of the essential lines.

## How to Build

Study the layout carefully before going to work on this model, as well as the parts and sizes. This will enable you to work with considerable knowledge, eliminating the possibility of mistakes.

All parts are lettered and marked, giving the exact sizes, as shown in the illustrations. Mark each piece with the letter which is given it in the plans, so that you will know just where each piece belongs.

Follow the directions as you go, never proceeding to the next piece until you have completed the work you are doing. Drill all holes before nailing the parts into position. Do all your gluing when you are ready to stop work for several hours, so that this delay will not handicap you in any way.

## Necessary Material

1 piece	$\frac{1}{4}$ " x $\frac{3}{8}$ " x 1'
6 pieces	$\frac{1}{4}$ " x $\frac{1}{4}$ " x 3'
6 "	$\frac{1}{8}$ " x $\frac{1}{4}$ " x 3'
2 "	$\frac{1}{8}$ " x $\frac{1}{4}$ " x 4'
1 piece	$\frac{3}{16}$ " x $\frac{1}{2}$ " x 1'—Stream-line
2 pieces	$\frac{1}{16}$ " x $\frac{1}{4}$ " x 3'
2 "	$\frac{3}{16}$ " round wood x 2'
1 piece	1' x $\frac{1}{8}$ " reed
5 pieces	$\frac{1}{8}$ " x $\frac{1}{8}$ " x 3'
6	$\frac{3}{16}$ " V two-way sockets
12	$\frac{3}{16}$ " single sockets
1 piece	aluminum 4" x 24"
1	propeller hanger
4 sheets	bamboo paper
1 can	gope
1 can	ambroid
1 package	nails
1	10" racing propeller
2	2" rubber-tired wheels
40 feet	$\frac{3}{8}$ " flat rubber

## Forming of Parts

The parts that must be formed to shape are listed below. These are the only parts which need steaming or boiling in water. All other parts are straight wood.

- (A) 2 pieces of  $\frac{1}{4}$ " square wood  $29\frac{5}{8}$ " long for bottom longerons for fuselage.  
 (B) 1 piece of  $\frac{1}{4}$ " round reed 3" long for tail skid.  
 (C) 1 piece of  $\frac{1}{8}$ " round reed  $9\frac{3}{4}$ " long for rudder.

After soaking the wood for the proper length of time, take each piece as you need it and carefully place it between the nails, beginning at the curved parts.

Leave them to dry over night or for at least ten hours.

## Fuselage

First nail the two pieces for the bottom longerons (A),  $29\frac{5}{8}$ " long, to the uprights that are indicated, using  $\frac{1}{2}$ " wire nails. Be sure to drill  $1/32$ " holes

# KEY TO PARTS

Key	Part	Material	Amount	Size
A	Bottom Longerons	Wood	2	$\frac{1}{4}$ " x $\frac{1}{4}$ " x $29\frac{5}{8}$ "
B	Tail Skid	Reed	1	$\frac{1}{4}$ " x 3"
C	Rudder	Reed	1	$\frac{1}{8}$ " x $9\frac{3}{4}$ "
D	Upper Wing	Wood	1	$\frac{1}{4}$ " x $\frac{1}{8}$ " x 39"
E	Lower Wing	Wood	1	$\frac{1}{4}$ " x $\frac{1}{8}$ " x 32"
F	Elevator	Wood	2	$\frac{1}{8}$ " x $\frac{1}{8}$ " x $9\frac{7}{8}$ "
G	Elevator	Wood	2	$\frac{1}{8}$ " x $\frac{1}{8}$ " x $13\frac{1}{4}$ "
H	Upper Wing	Wood	4	$1/16$ " x $\frac{1}{4}$ " x 8"
I	Struts	Round Wood	6	$\frac{3}{8}$ " x $5\frac{3}{4}$ "
J	Upper Longerons	Wood	2	$\frac{1}{4}$ " x $\frac{1}{4}$ " x 29"
K	Rudder Post	Wood	1	$\frac{1}{4}$ " x $\frac{3}{8}$ " x $6\frac{3}{4}$ "
L	Propeller Hanger	Aluminum		
M	Hanger Brace	Wood	1	$\frac{1}{4}$ " x $\frac{1}{4}$ " x $3\frac{1}{8}$ "
N	Cross Piece (Nose)	Wood	1	$\frac{1}{4}$ " x $\frac{1}{4}$ " x $3\frac{1}{4}$ "
O	Wing-rib Brace	Wood	1	$\frac{1}{8}$ " x $\frac{1}{4}$ " x 38"
P	Fin	Wood	1	$\frac{1}{8}$ " x $\frac{1}{4}$ " x $3\frac{5}{8}$ "
			1	$\frac{1}{8}$ " x $\frac{1}{4}$ " x $2\frac{1}{8}$ "
Q	Wing Ribs (Lower)		4	$\frac{1}{8}$ " x $\frac{1}{4}$ " x $6\frac{3}{4}$ "
R	Wing-tip	Wood	2	$\frac{1}{4}$ " x $\frac{1}{8}$ " x $6\frac{1}{8}$ "
S	Wing Rib (Lower)	Wood	2	$\frac{1}{8}$ " x $\frac{1}{8}$ " x $6\frac{1}{8}$ "
T	Landing-gear Struts	Round Wood	4	$3/16$ " x $4\frac{1}{2}$ "
U	Landing-gear Axle Sockets	Aluminum	2	$3/16$ " two-way
V	Landing-gear Axle	Stream-lined Wood		$\frac{1}{2}$ " x $3/16$ " x $8\frac{1}{2}$ "
W	Landing-gear Longeron Sockets	Aluminum	4	$3/16$ " single

(D) 1 piece of  $\frac{1}{4}$ " x  $\frac{1}{8}$ " wood 39" long for leading edge of upper wing.

(E) 1 piece of  $\frac{1}{4}$ " x  $\frac{1}{8}$ " wood 32" long for leading edge of lower wing.

(F) 2 pieces of  $\frac{1}{8}$ " x  $\frac{1}{8}$ " wood  $9\frac{7}{8}$ " long for elevator.

(G) 2 pieces of  $\frac{1}{8}$ " x  $\frac{1}{8}$ " wood  $13\frac{1}{4}$ " long for elevator.

(H) 4 pieces  $1/16$ " x  $\frac{1}{4}$ " wood 8" long for wing ribs on upper wing.

These pieces must be steamed or placed in a large vat or vessel containing hot water. Let them soak thoroughly for one hour or more. During that time keep pouring more hot water into the vessel so that the water will stay at a hot temperature.

Tack the assembling and forming layout on a flat, even board and drive 1" wire nails at the marks indicated. This makes the form and curves as illustrated.

first. There are two uprights for each of the following sizes:

$\frac{1}{4}$ " x  $\frac{1}{4}$ " x  $3\frac{1}{4}$ "

$\frac{1}{4}$ " x  $\frac{1}{4}$ " x  $3\frac{1}{8}$ "

$\frac{1}{4}$ " x  $\frac{1}{4}$ " x  $2\frac{3}{4}$ "

To these, nail in position the upper longerons (J),  $\frac{1}{4}$ " x  $\frac{1}{4}$ " x 29", starting at the rudder stick (K), which is  $6\frac{3}{4}$ " x  $\frac{1}{4}$ " x  $\frac{3}{8}$ ". This will serve to keep your fuselage in shape and hold its proper lines. It will be necessary to nail the rudder post at the rear end of the fuselage; before doing this, take a sharp razor blade or a small saw and cut the tail ends of the longerons (both upper and bottom) so that they will fit together and be  $\frac{1}{4}$ " wide (see Plate No. 7). This cut will be about  $\frac{1}{2}$ " long and angled off to  $3/16$ " wide.

Tie together with wire. Be careful to place the uprights at the points indicated. Make both sides alike.

The cross-pieces that hold both sides of the fuselage together consist of the following:

4 pieces  $\frac{1}{4}" \times \frac{1}{4}" \times 2\frac{3}{4}"$

2 pieces  $\frac{1}{4}" \times \frac{1}{4}" \times 2\frac{1}{8}"$

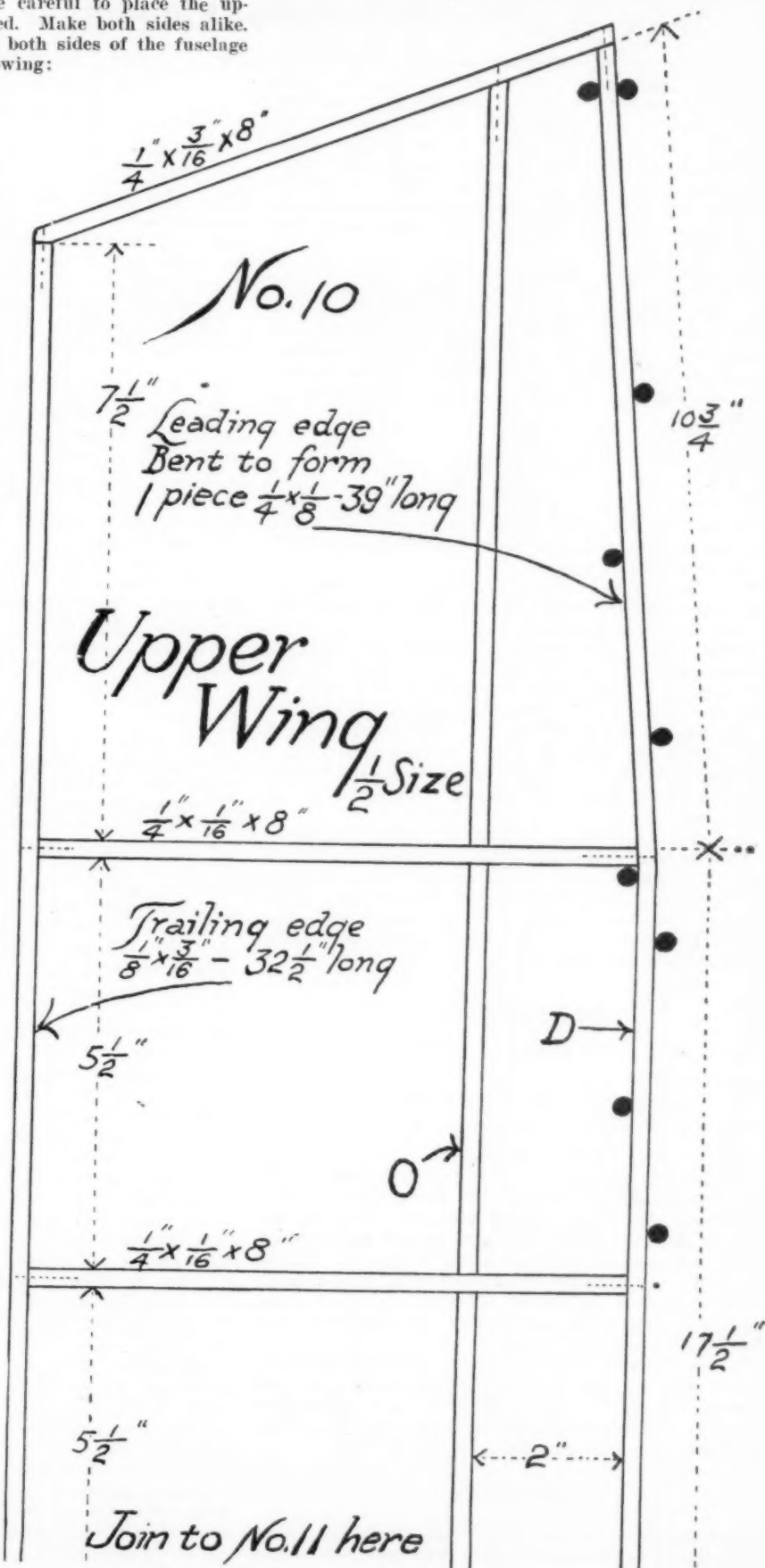
These are nailed at their proper places as indicated on the layout. There is an addition to be made at the tail end, between the top longerons, which is a piece  $1\frac{1}{4}" \times \frac{1}{4}" \times \frac{1}{8}"$ . This is to hold the fin. Be sure that the rudder post (K) is nailed where the illustration shows it should be.

A piece of very light aluminum  $3\frac{3}{4}" \times 12"$  is used as the cowl. It is nailed to the top longerons at the nose as illustrated. Curve this slightly before nailing it in place. Cut a half-circle at the end to appear like a cockpit. Now nail the tail skid into place, taking a piece of wood 1" long and cutting it to fit, so that it will hold in the top of the tail skid. This piece of wood is nailed between the bottom longerons,  $1\frac{3}{4}"$  in from the rudder post. Insert the reed through the hole drilled for the purpose and then nail the reed on the rudder post (K). This completes the tail skid.

Another piece of light aluminum  $10\frac{1}{2}"$  long is needed,  $3\frac{1}{4}"$  wide at the wide end facing the back of the cockpit which will also have a half-circle cut at this point and narrowed down to  $2\frac{1}{2}"$  at the tail end. Curve this slightly to appear like a cowl and nail to the top longerons, leaving a  $2\frac{1}{2}"$  hole for the cockpit.

### Propeller Hanger

We will next proceed to mount the propeller hanger (L). Take an ordinary propeller hanger, nail or screw it firmly onto a piece of wood (M)  $3\frac{1}{8}" \times \frac{1}{4}" \times \frac{1}{4}"$ . This will be all that is needed to hold it firmly into position. To mount it securely into position, take a piece of wood  $\frac{1}{4}" \times \frac{1}{4}" \times 1\frac{1}{8}"$  and nail it at the end of the hanger brace (M). This should then be nailed to the cross member on the fuselage that runs between the bottom longerons at this position. Next comes a



cross-piece on the nose (N) that must be screwed tightly into place. This cross piece is  $\frac{1}{4}$ " x  $\frac{1}{4}$ " x  $3\frac{1}{4}$ " and is held in place by a screw through the propeller hanger. Nail this cross piece to the two pieces  $\frac{1}{8}$ " x  $\frac{1}{4}$ " x  $2\frac{7}{8}$ ", which are then nailed to the two nose ends of the fuselage. After this is done, you will have your nose piece held firmly in position. Glue all joints carefully and well, using the best glue obtainable for the purpose. Do not work on the model until the glue has set.

Next proceed with the fin (P). This consists of one piece of wood  $\frac{1}{8}$ " x  $\frac{1}{4}$ " x  $3\frac{5}{8}$ " long and one piece  $2\frac{1}{8}$ " long. Nail them together, the shorter piece against the rudder post (K) and the longer piece to a small piece of wood  $1\frac{1}{4}$ " long x  $\frac{1}{8}$ " x  $\frac{1}{4}$ ". This piece is nailed between the upper longerons, 4" away from the rudder stick, using this as a foundation for a  $3\frac{5}{8}$ " piece on the fin.

### Lower Wing

The wings on this model are of sweep-back shape. These add to the appearance of this type of plane. They are formed and are ready to work on as shown in the drawings.

Place piece (E), leading edge, on a flat surface and take four pieces  $\frac{1}{8}$ " x  $\frac{1}{4}$ " x  $6\frac{3}{4}$ " (Q) and nail them at their respective positions.

Follow your layout carefully, taking care that all measurements are correct. This wing is not curved and is perfectly flat. The trailing edge is a piece of wood  $\frac{1}{8}$ " x  $\frac{1}{4}$ " x  $28$ ". This is to be nailed in place on the ribs of the wing, the four  $6\frac{3}{4}$ " pieces marked (Q), adding the wing-tip pieces marked (R). Place the piece (S)  $\frac{1}{8}$ " x  $\frac{1}{8}$ " x  $6\frac{1}{8}$ " into place, forming the complete lower wing. The size of (R) is marked on the layout.

Take this wing and nail it to the bottom longerons at the position indicated,  $17\frac{1}{4}$ " in from the rudder post (K). Drive nails right through wing members into the bottom longerons on the bottom side. This completes the lower wing. By the usual procedure cover all the surfaces with bamboo paper, using glue to attach it to the frames.

### Landing-gear

The landing-gear is formed of the following material:

- 4 pieces  $3/16$ " round wood  $4\frac{1}{2}$ " long (T)
- 2 two-way  $3/16$ " socket fittings (U)
- 1 piece stream-lined wood,  $\frac{1}{2}$ " x  $3/16$ " x  $8\frac{1}{2}$ " (V)
- 4  $3/16$ " single sockets (W)

The two-way fittings (U) are wired and glued  $\frac{1}{2}$ " in from the ends of the stream-lined wood, which is (V). Wind a rubber band around the axle (V) and the fittings (U). The 4  $3/16$ " single sockets are inserted in the top ends of the  $3/16$ " round wood (T). These are later screwed to the bottom longerons into the position indicated on the layout; place the two rear struts  $19\frac{1}{4}$ " away from the rudder post and the front two struts  $4\frac{1}{8}$ " away from these.

To attach the wheels to the axle, take two  $\frac{3}{4}$ " nails with heads, placing a washer on the inside and outside of the wheel. Gently drive the nail through at each end of the stream-lined piece of wood (V). The landing-gear is now complete.

### Elevators

The elevators on this model are stationary, being made up in one complete piece. The material needed for these is as follows:

- (F) 2 pieces  $\frac{1}{8}$ " x  $\frac{1}{8}$ " x  $9\frac{7}{8}$ "
- (G) 2 pieces  $\frac{1}{8}$ " x  $\frac{1}{8}$ " x  $13\frac{1}{4}$ "
- 2 pieces  $\frac{1}{8}$ " x  $\frac{1}{8}$ " x  $6$ "
- 6 pieces  $\frac{1}{8}$ " x  $\frac{1}{8}$ " x  $4\frac{3}{8}$ "
- 2 pieces  $\frac{1}{8}$ " x  $\frac{1}{8}$ " x  $4\frac{1}{2}$ "

Take these pieces and make up two elevators, laying them out as illustrated in the layout. Nail and glue each part in place, joining all the cross members at the joints firmly. This is to be covered with bamboo paper, doped and dried, attaching it to the top of the longerons by means of two screws.

The fin should line up near the elevators at the leading edge of the tail unit.

### Upper Wing

The upper wing has a wing curve that is slightly noticeable. This is made up with the 4 pieces (H),  $1\frac{1}{4}$ " x  $\frac{1}{4}$ " x  $8$ ", that are already curved and 4 pieces,  $1\frac{1}{16}$ " x  $\frac{1}{4}$ " x  $8$ ", not curved. Nail these to the leading and trailing edges together, forming a wing curve, and drive the nails through the curved ribs, the leading edge and the flat bottom rib. The same applies to the trailing edge which is the  $32\frac{1}{2}$ " long piece. The piece (O)  $38$ " long x  $\frac{1}{8}$ " x  $\frac{1}{4}$ ", used as a wing-rib brace, should then be nailed into place. This is 2" away from the leading edge (D).

Examine your drawings carefully, seeing that all your measurements are correct.

### Assembling

With the aid of 4 small blocks  $\frac{1}{4}$ " x  $\frac{1}{4}$ " x  $\frac{1}{2}$ " the ribs are held to the proper shape. These can be securely held into place by driving small nails through the upper rib, the block, the wing-rib brace and the lower rib. Cover them with bamboo paper, gluing along the edges and applying a double coating of dope to take up the slack in the paper. The upper wing is then complete. It is a very light, strong wing with very little work attached to it.

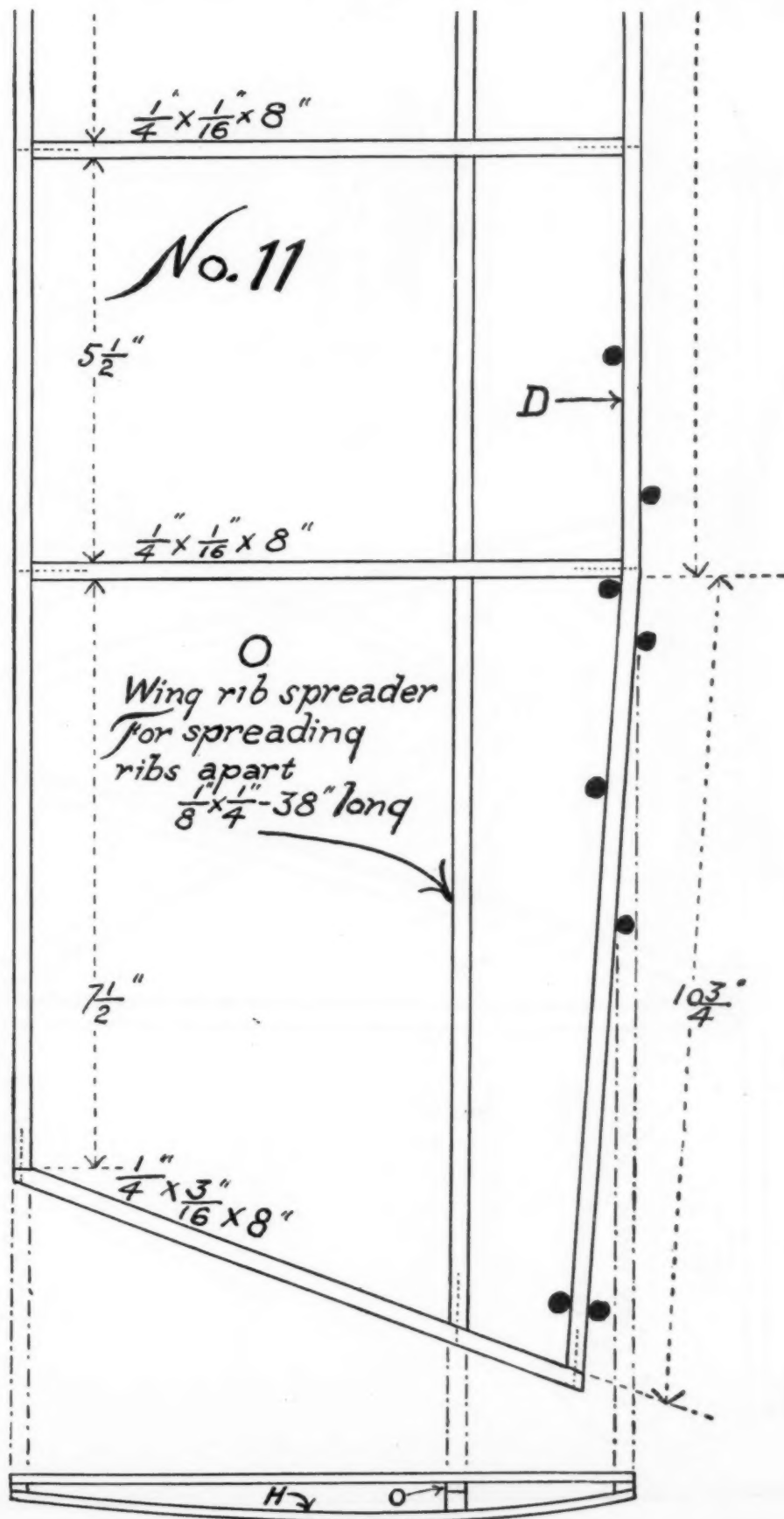
The top wing is attached to the fuselage by means of two  $3/16$ " straight single sockets which are screwed to the top wings on the leading edge and two of the same sockets are screwed to the top longerons, one on each side,  $2\frac{1}{8}$ " in from the nose. These are connected together by  $3/16$ " round wood used as wing struts. They are 2" long.

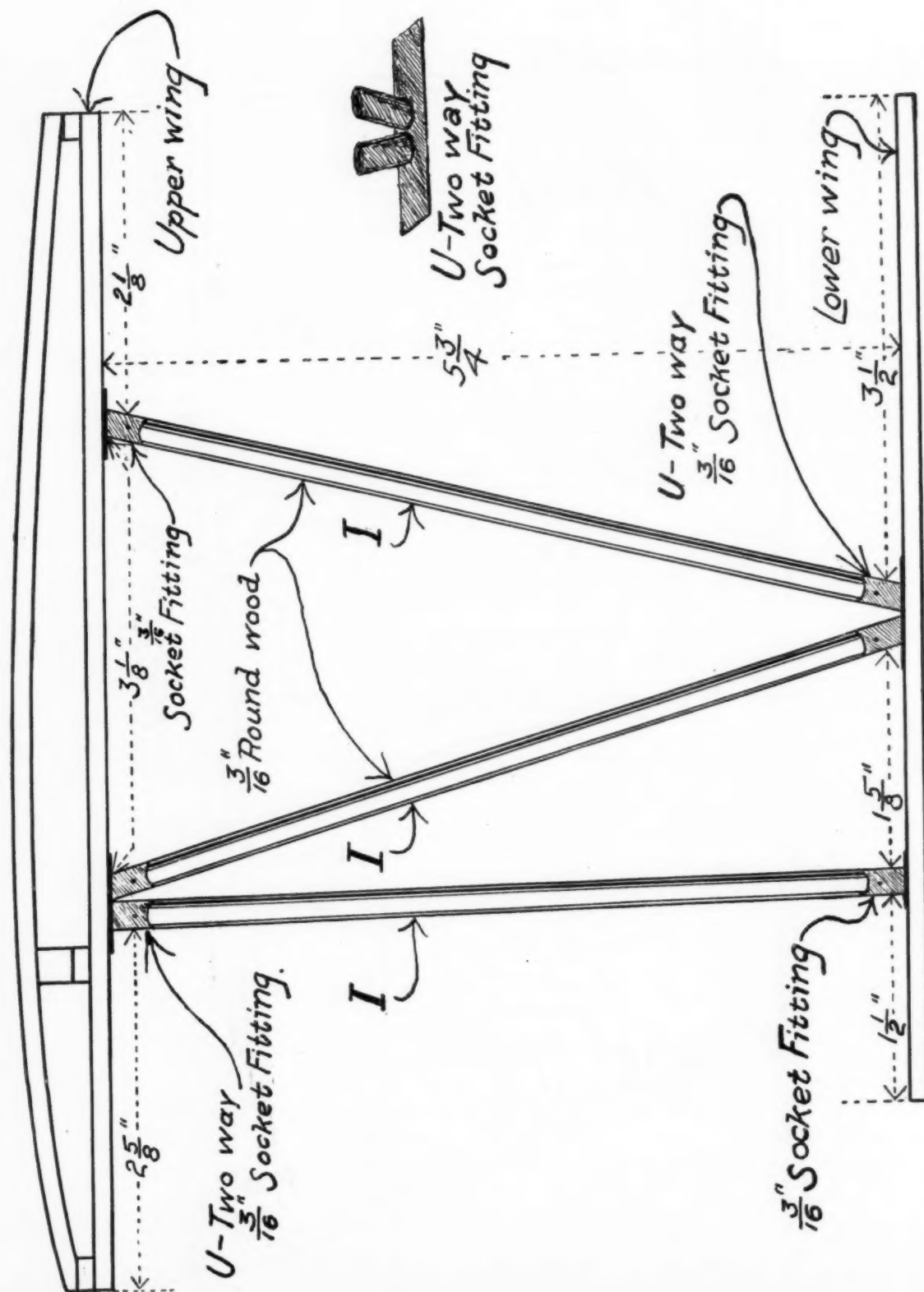
The struts of this model are of the N type, each side consisting of two  $3/16$ " V, two-way sockets and two  $3/16$ " single sockets. These are screwed on the wing ribs of the upper and lower wings, one V socket  $3\frac{5}{16}$ " in from the leading edge of the lower wing and one V socket  $2\frac{5}{8}$ " in from the leading edge on the under side of the upper wing. The single sockets are screwed into place, one at  $1\frac{1}{2}$ " in from the leading edge of the lower wing and the other  $2\frac{1}{8}$ " in from the trailing edge on the under side of the upper wing. These are joined together by  $3/16$ " round wood,  $5\frac{3}{4}$ " long, glued and shaped to appear like a letter N. Attach all struts together, gluing each and every socket before inserting the struts.

Adding on a 10" racing propeller that has been either purchased or made, the model will be complete and ready to fly. To add to the appearance of the model, wire may be strung across several parts of the wings and tail units.

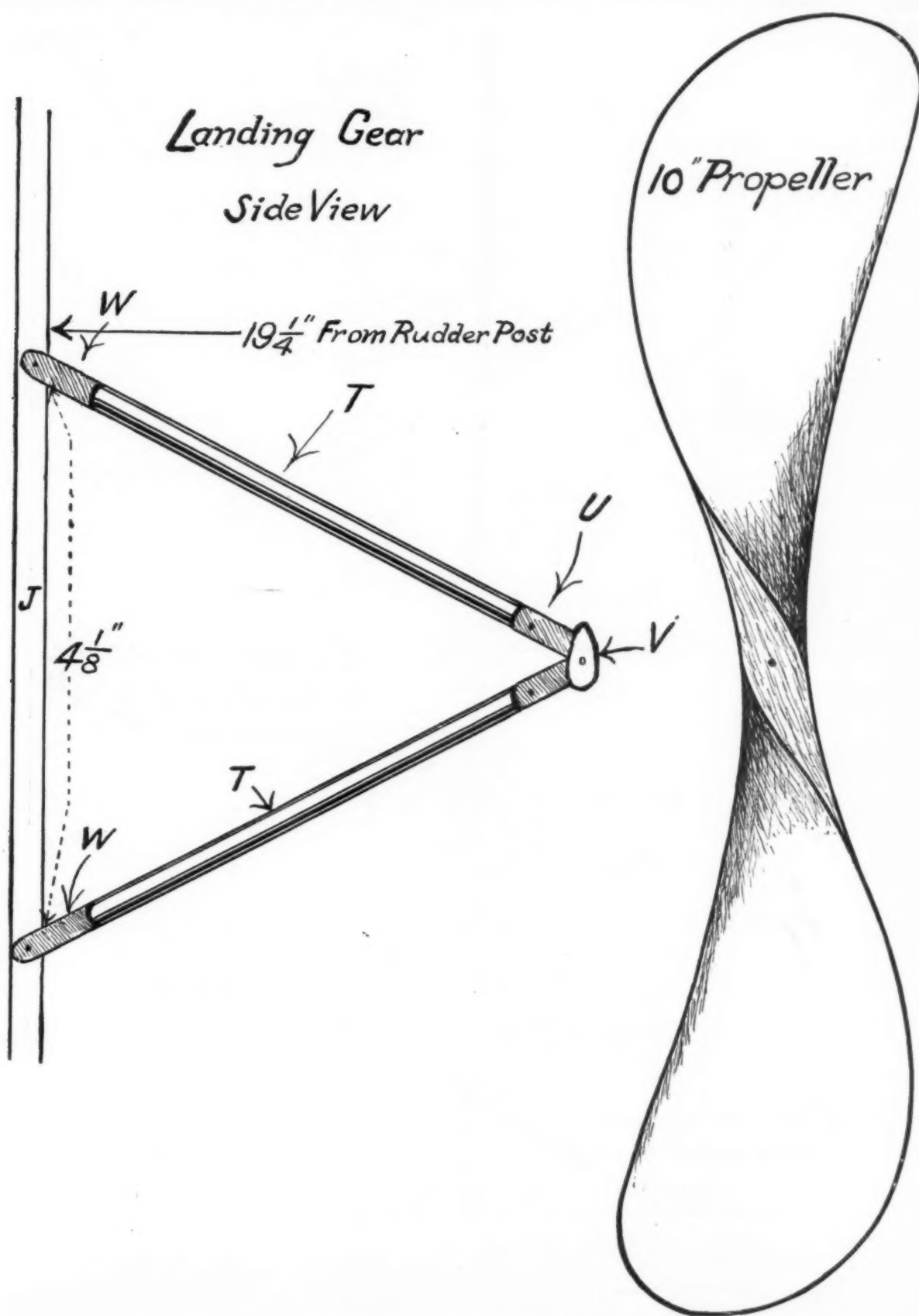
If you have carefully followed the instructions and diagrams given above, you will find yourself the possessor of one of the finest models of its type—one which very closely duplicates the regulation Army pursuit plane. You will also find that your results justify your labor.

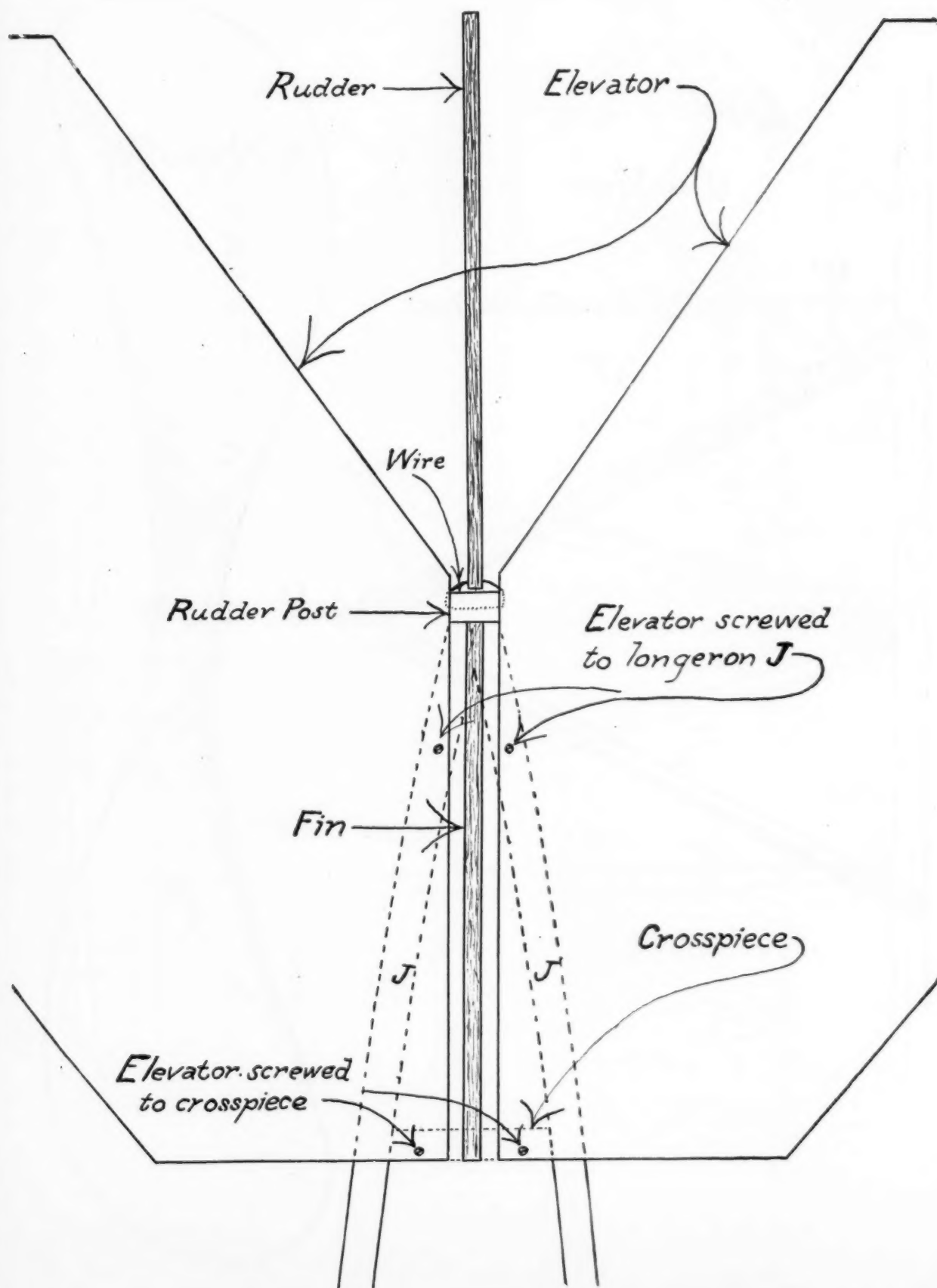






*Landing Gear  
Side View*

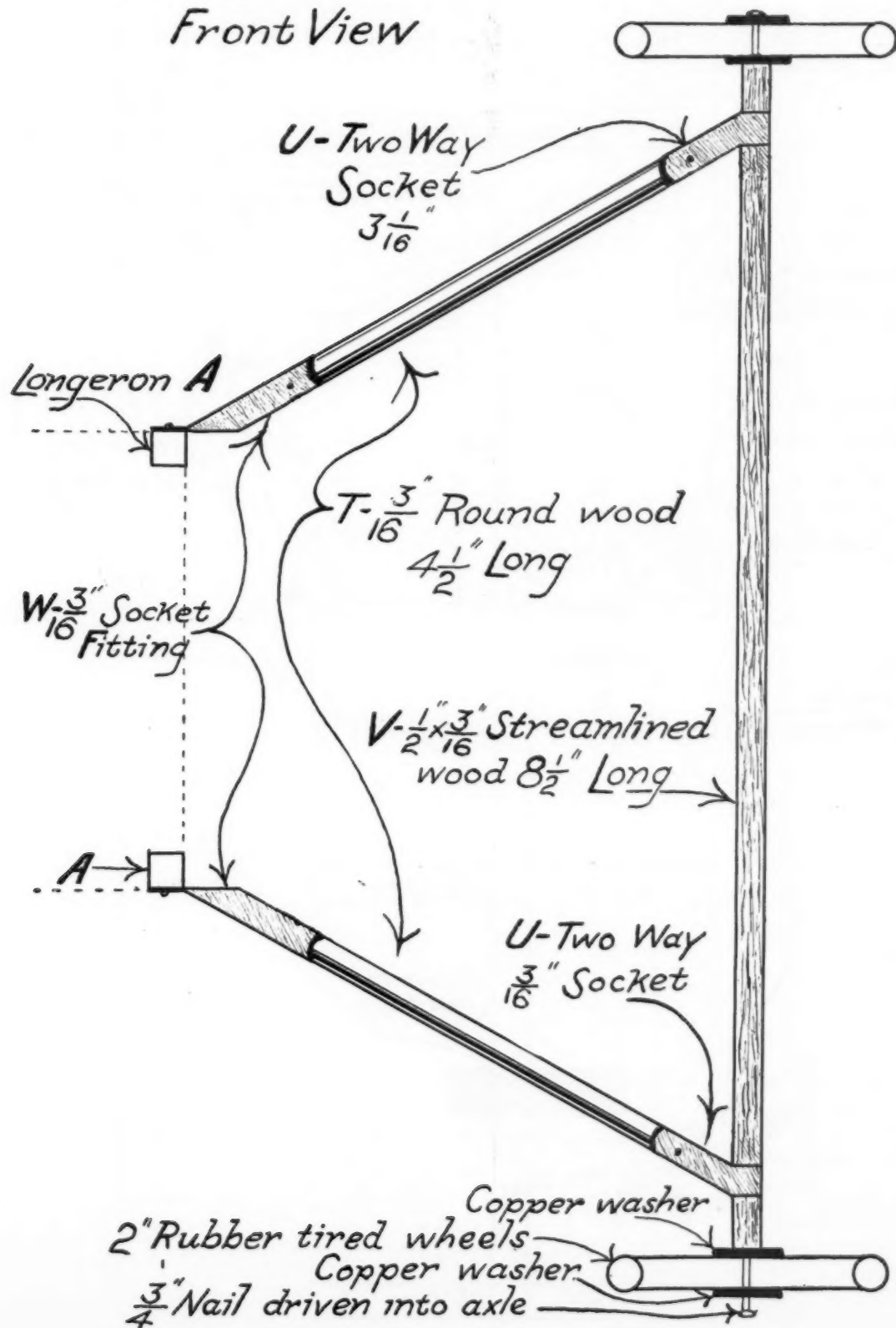


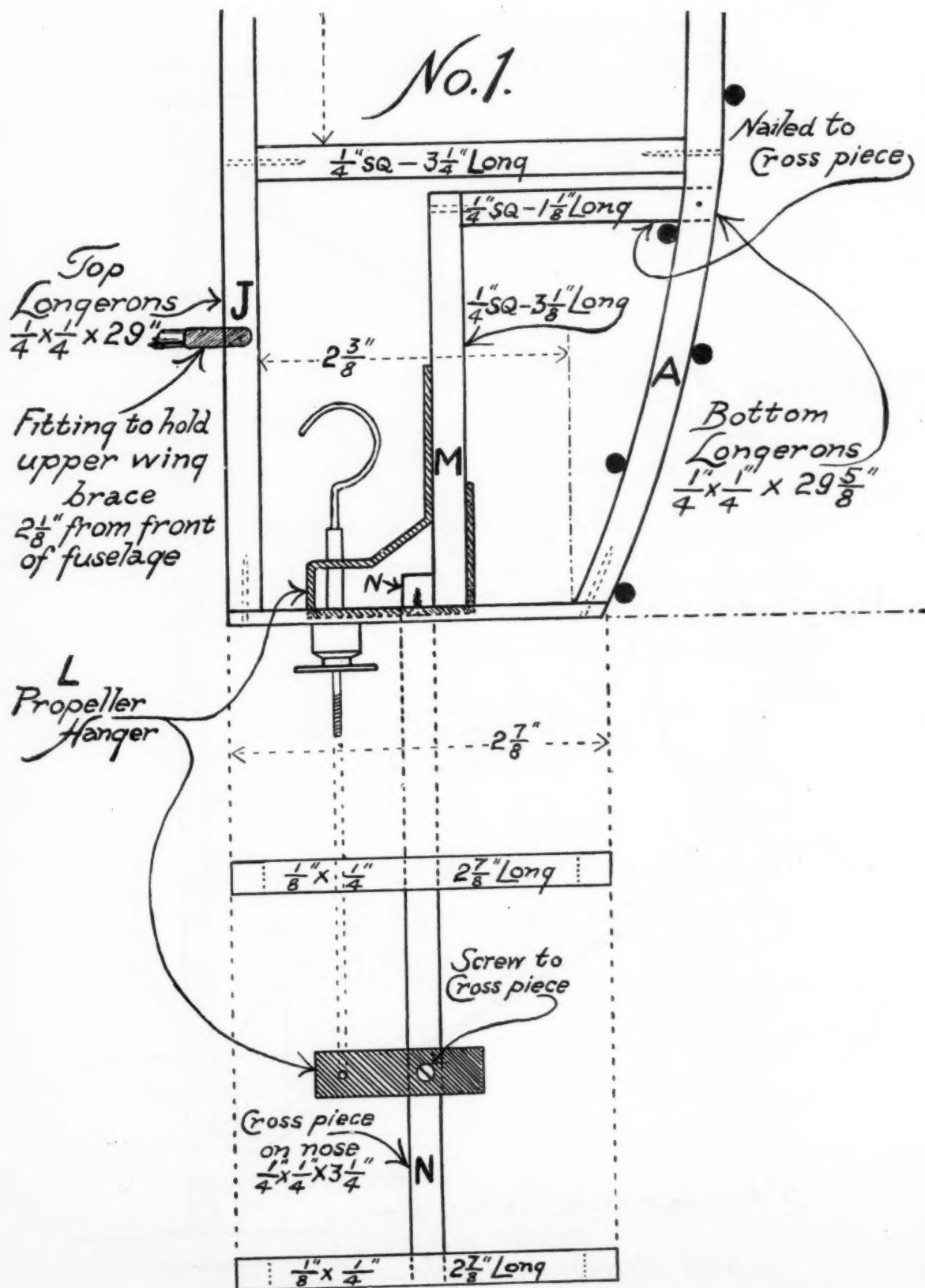


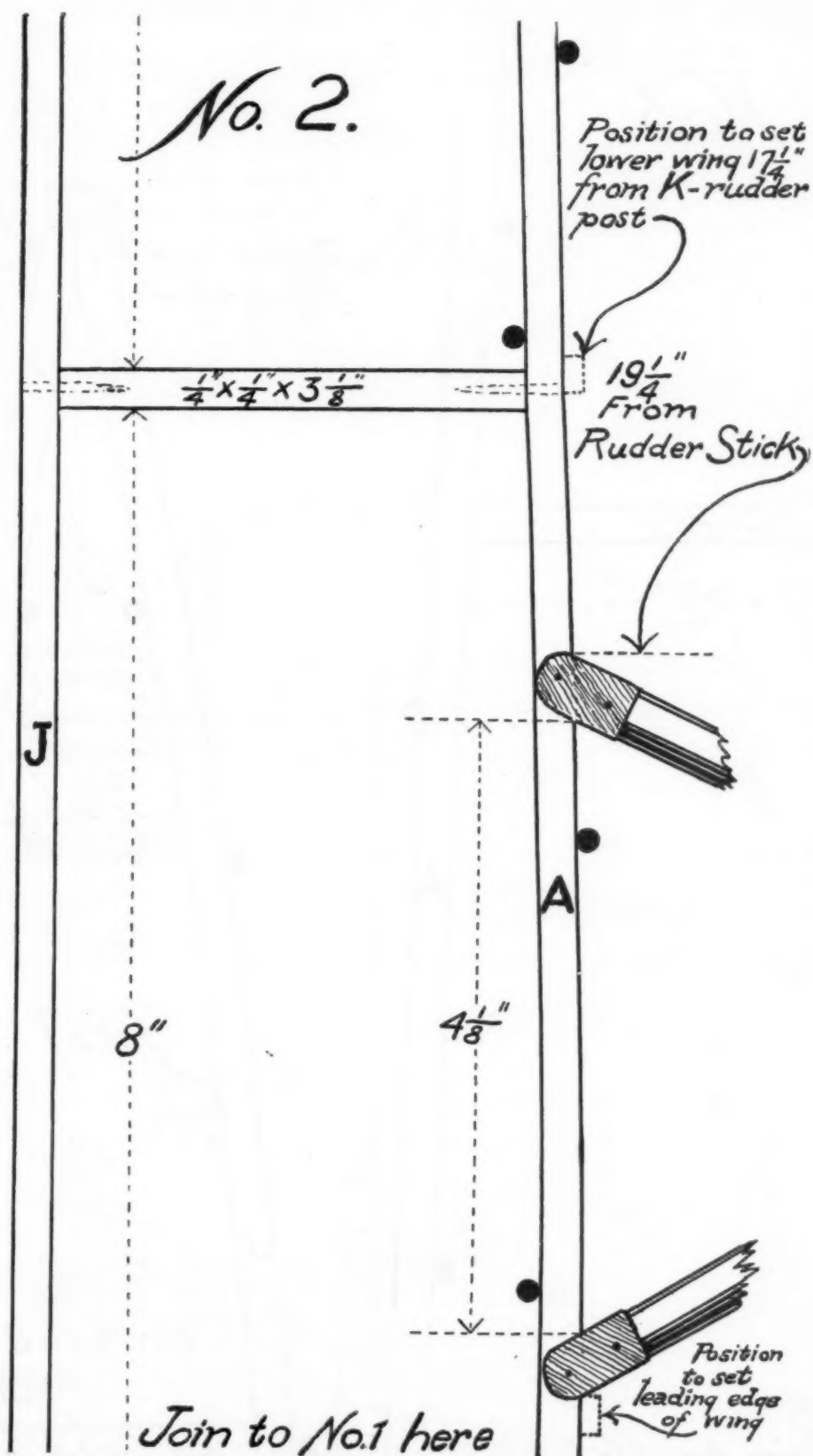


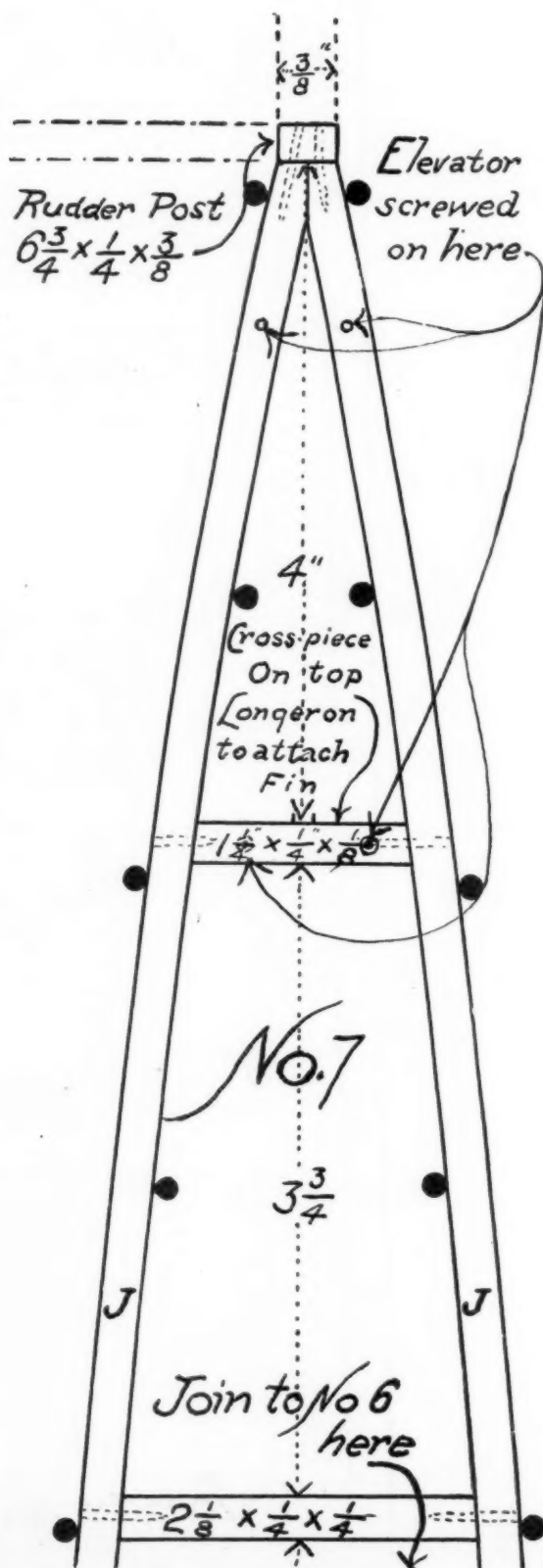
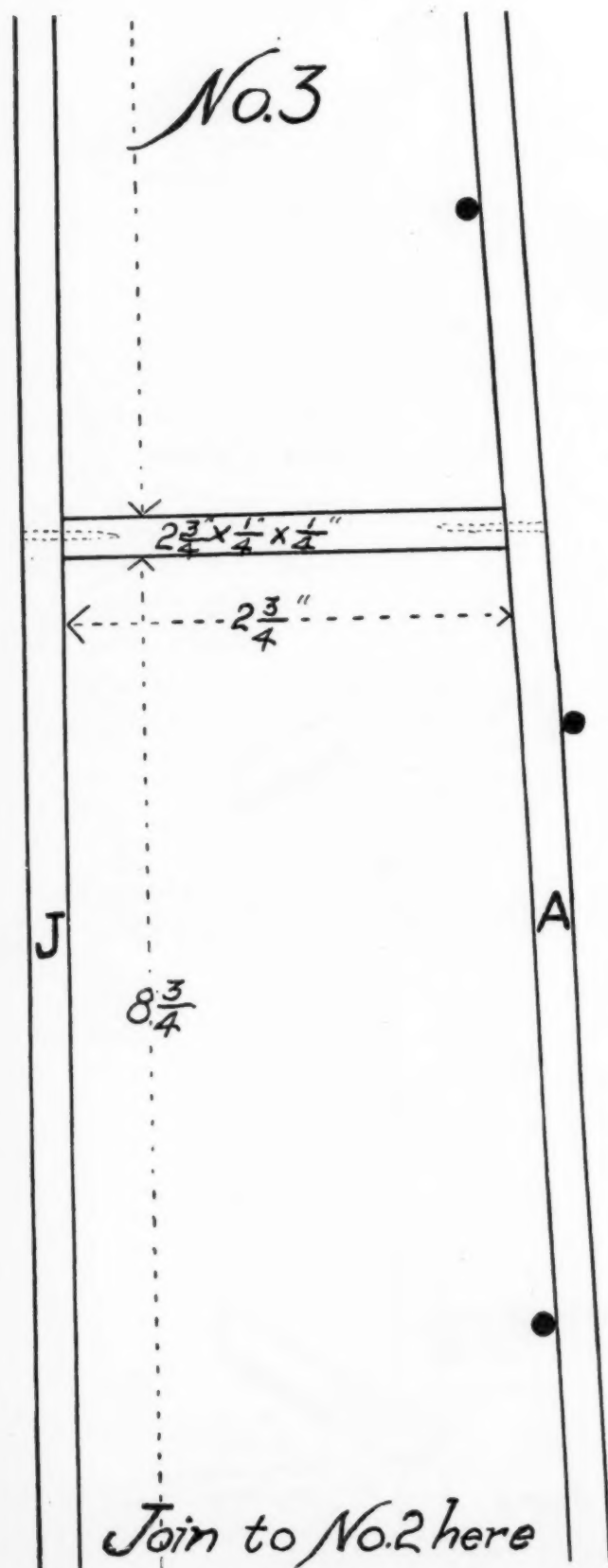
# Landing Gear

## Front View

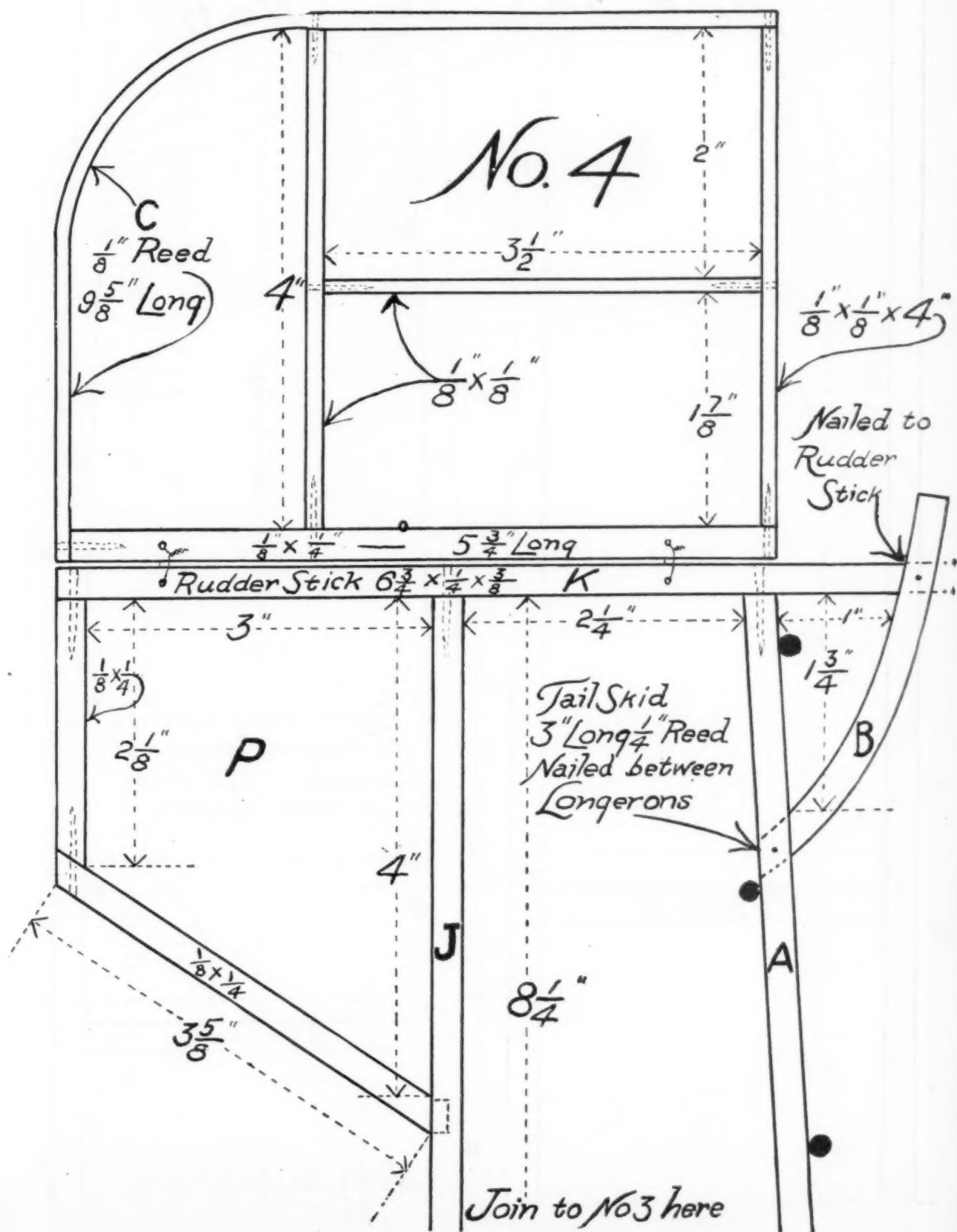




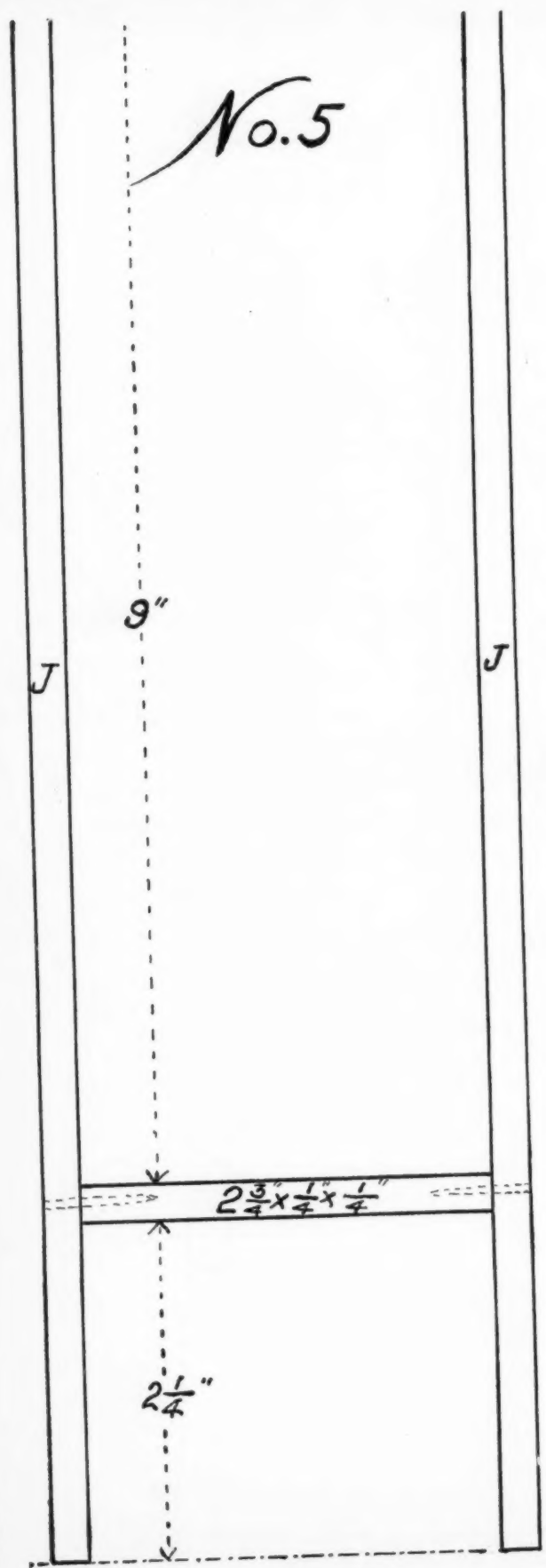




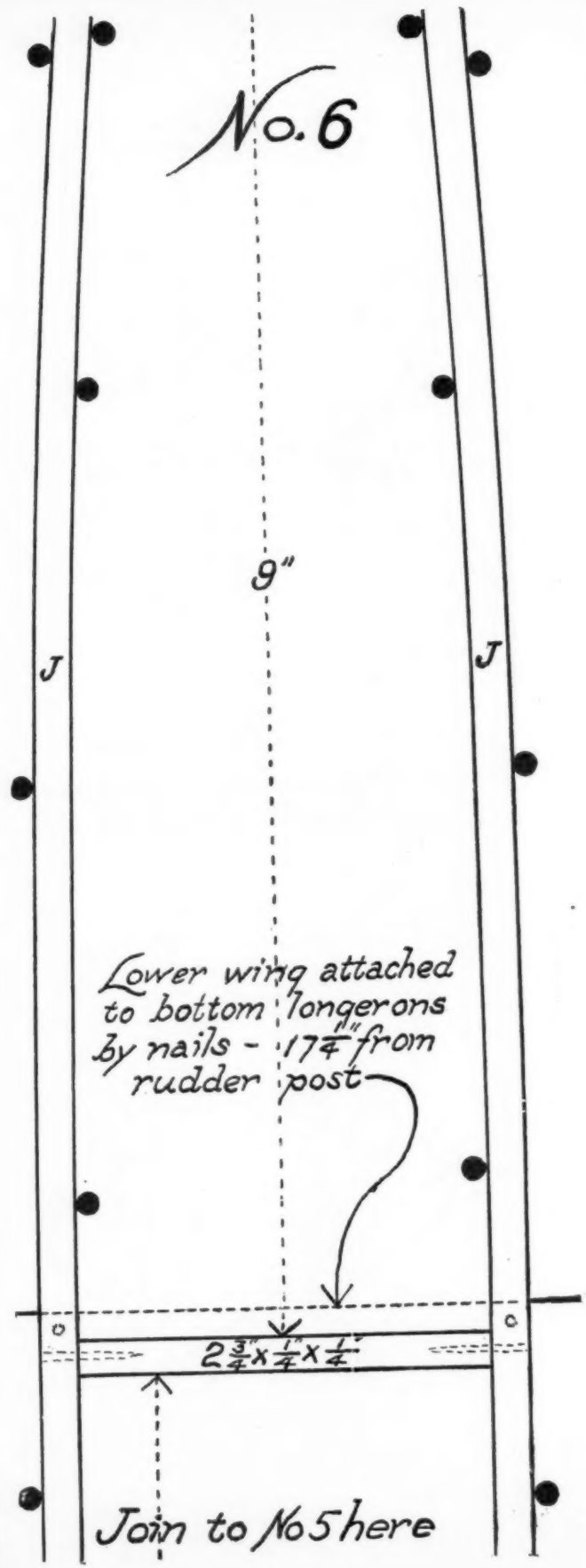


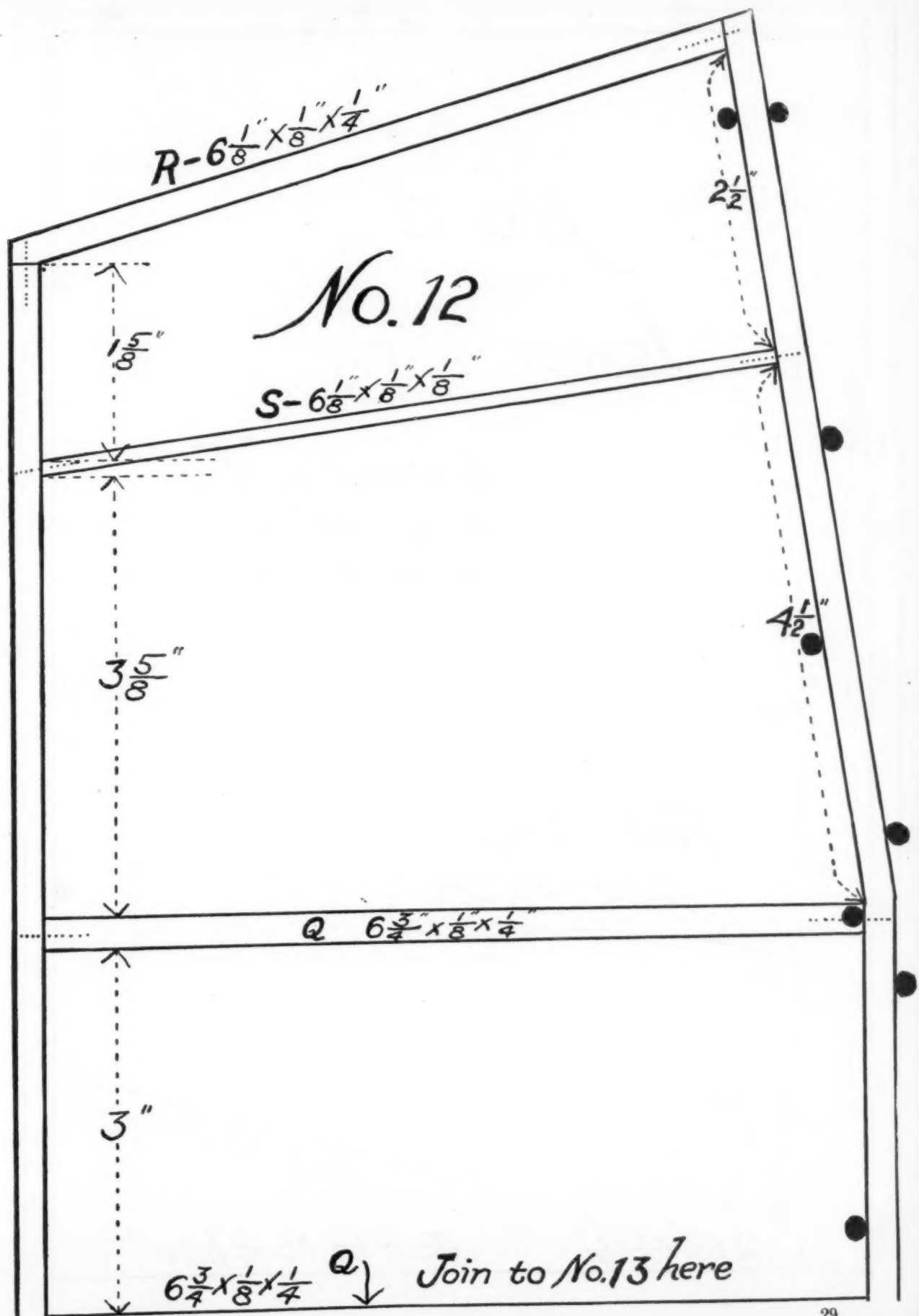


No. 5



No. 6





No. 13  
Lower Wing

Leading Edge  $E$   
 $\frac{1}{8} \times \frac{1}{4}$  - 32" Long  
Bent to shape

$10\frac{1}{4}$ "

Trailing Edge  
 $\frac{1}{8} \times \frac{1}{4}$  - 28" Long

Q  $6\frac{3}{4} \times \frac{1}{8} \times \frac{1}{4}$

Join to No 14 here



No. 14

3"

Q -  $6\frac{3}{4}" \times \frac{1}{8}" \times \frac{1}{4}"$

$3\frac{5}{8}"$

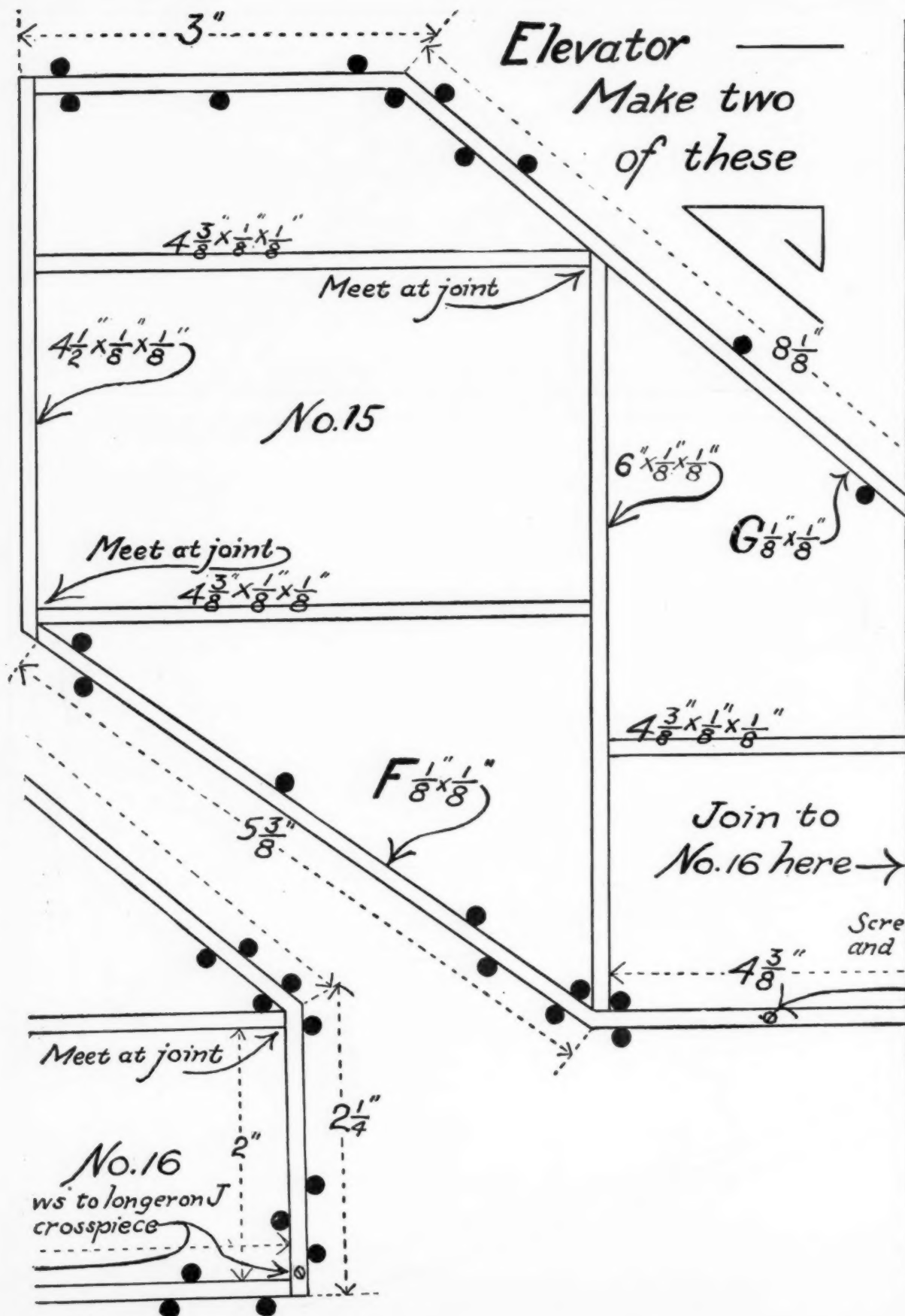
S -  $6\frac{1}{8}" \times \frac{1}{8}" \times \frac{1}{8}"$

$1\frac{5}{8}"$

R -  $6\frac{1}{8}" \times \frac{1}{8}" \times \frac{1}{4}"$

$4\frac{1}{2}"$

$2\frac{1}{2}"$





Tommy Discovers the  
Hidden Valley  
and on His Way to  
Solve the Mystery  
Flies into  
Even Greater Dangers

"I'm tellin' you it don't  
make no difference—he ain't  
in that plane o' course, but  
that's one o' his pals, that's  
what it is."

# The FLYING BLACK SHEEP

BY LAURENCE DONOVAN

**O**N Tommy's sixteenth birthday trouble descends on Saddle Mountain and involves cattlemen, sheepmen and Tommy's family particularly. Cattle and sheep have been poisoned and, as a result, a feud breaks out between the cattlemen and sheepmen.

Tommy Carew and Tad Wickers have been lifelong friends. Both are air-minded and plan to own a plane together some day. Mr. Wickers, the cattleman, accuses Tommy's father of poisoning his cattle and soon after that Mr. Carew is mysteriously shot through the shoulder. This brings the friendship between the two boys to an end. Tommy believes Tad to be his enemy.

Tad's father is murdered and Mr. Carew is accused because of the feud between them. Tommy, who has been taught to tell the truth, admits seeing his father near the scene of the murder. This earns him the hateful nickname of "Baa-Baa."

While his father is in jail, Tommy shoulders the family burden. A plane crashes near his home and the pilot gives it to Tommy who proceeds to reconstruct it. With the help of his brother and sister, he clears a space for a landing-field and, leaving them to continue the work, goes to flying school.

Tommy learns to fly quickly and returns to Saddle

*Mountain, hoping to earn his living as a pilot. He goes to look at his plane, only to find it burning and beyond hope of saving. Looking up from the ruins, he sees Tad Wickers hurrying down the trail.*

**T**OMMY reached the trail and called to Tad, but his former pal hurried on and did not look back. Tommy tried not to believe that Tad had burned his plane.

But what had Tad been doing above the sheep meadows of Splitneck Canyon? The trail he was following ended, Tommy knew, in the abrupt side of an impassable mountain hogback.

Tommy was winded from his climb up the cliff and he was forced to let Tad go. Somehow, he did not want to overtake him. He was sick all over. The loss of his plane after he had spent the money to learn to fly was bad enough, but to think that the boy who had been his closest friend might be responsible was worse.

Tommy made his way slowly back to the Carew cabin. His mind was in a turmoil. What should he do now? Had Tad done this thing? And if so, why?

It came to Tommy that all of the trouble on Saddle Mountain had started in Splitneck Canyon. Each time there had been a shooting, Tad's father, now murdered, had been seen on that same canyon trail. Evidently Wickers had been up that trail on the day he himself was killed.

The cattle that had been poisoned had drunk from the spring closest to the canyon. The sheep that had been killed by savage dogs were in the Splitneck Canyon meadows. Thinking it over, Tommy recalled that even the cattle that had disappeared had last been seen in the canyon pastures or near-by.



Two men emptied their rifles as Tommy flew by

Now his plane had been destroyed. Could there really have been some one watching that day he built the shelter for the plane? And was it Tad?

Tommy decided that he could not stay on Saddle Mountain. He was afraid he was too young to find a

flying job, but, keeping a stiff upper lip and smiling even though it hurt, he prepared to go back to the aviation field and find some kind of work. He knew he never again would be satisfied to keep his feet on the ground.

Once more Tommy tried to figure how he could get enough money from the small herd of cattle to finance the buying of a plane. He gave it up in despair. It would take nearly all the cattle were worth to pay Mr. Nesbit the money he had lent him to learn to fly.

**O**N the day before he was to go down the mountain again, Tommy awakened, built a fire, and went to the cabin door. A white envelop lay on the floor at his feet. It had his name printed across it with a pencil. Tommy opened the envelop and gasped at what he saw.

Five crisp, hundred-dollar bills fluttered into his hand. A sheet of notepaper fell to the floor. Tommy picked it up. Again in pencil printing there were the words: "A friend who understands."

That was all.

That same afternoon, Murphy, his friend from the flying field, landed on Tommy's new landing meadow. He praised Tommy's foresight in clearing the space.

"I could spot that meadow and the flag markers five miles away," he told Tommy.

When he learned all that had happened, he quickly devised a way for Tommy to

get a plane. He would do better, anyway, he told Tommy, with one of the the new light Golcondas that could carry more than half a ton in its freight cockpit.

Yes, it would cost more than \$3,000, but if Tom-

my could make enough to meet reasonable payments it might be accomplished.

A week later Tommy took off from the city flying field in the trim-winged Golconda. His motor sang a sweet tune of power as he swept into the sky. Two hours later he had loaded 500 pounds of coffee, sugar and other supplies at Astoria, and, when he took the air again,



he felt that life's great adventure had begun for him.

So quickly did the humps of Saddle Mountain swim into the horizon that Tommy was surprised. The trip could easily be made each way in less than an hour. Why, he could fly the route three or four times each day if he could get the business.

Tommy pulled back his stick and climbed to 4,000 feet above the southern hump of the mountain. Then he eased



the stick forward and volplaned in a long spiral toward the space between

the peaks. He was enjoying himself so thoroughly that he pulled the stick back again and banked with his ailerons, turning toward the northern peak.

Tommy had a funny notion. He wanted to see that old eagle that nested somewhere on the hump, wanted to soar past the majestic bird, just to show him he had found the wings of which he had dreamed so long. Yes, the eagle was there. He was gliding around the peak, his great wings outspread, showing not a single quiver as he used the rush of the wind itself to keep aloft.

Tommy chuckled to himself and banked the Golconda again, heading the nose for home and his new landing-field. Then he decided to pull a surprise on his brother and sister. Probably they had seen the plane high up. Now he would drop down below the northern peak until he was over Splitneck Canyon. That would hide his plane from Jack and Martha, until he zoomed over the tall fir trees and came down upon them suddenly.

He studied the lay of the land under him as he dropped below the level of the peak. For a few seconds all he could see was a jumble of rocks and forest. This was the region far above and beyond the meadows occupied by the cattlemen and sheepmen. Tommy was a few miles north of Splitneck Canyon and still over the tangled wilderness, when he looked straight down and started with surprise.

Apparently surrounded on all sides by steep cliffs, a smooth meadow lay in a hidden valley directly under him. The presence of this valley itself might not have seemed unusual, but to Tommy's amazement a long, low cabin stood at one side and near the cabin lay a black-winged plane.

Tommy was flying at only 1500 feet now and he knew there could be no mistake about the plane. Moreover, he could see that the meadow was apparently smooth and that at each end stood two tall trees that had been stripped of their branches. Colored rags streamed from the tops of each of the denuded trees.

Tipping his ailerons, Tommy banked once more, gliding down until he was flying close along the rim of the hills above the valley. Now he could see smoke coming from the cabin chimney and the figures of several men near the plane. Tommy's mind went back to the day that the black-winged plane had flown over the Carew cabin, the same day that its shadow had seemed to fall upon him and leave him with a premonition that something evil was about to take place.

**H**E recalled that all of the disaster that had overtaken the people of Saddle Mountain had dated from that time.

But why was there a cabin in this isolated valley?

Tommy judged that the only way out would be by plane. Who had found this valley and who were these men with the black plane?

The Golconda reached the hills at the lower end of the valley and Tommy banked to circle it again. He was flying with the edge of the cliff on his right side.

In the thunder of his motor, Tommy did not hear the shots. He was first made aware that his plane was being fired upon when a jagged notch appeared in the rim of his cockpit and he heard a bullet buzz like a huge bee past his head. He saw a small hole appear in the wing fabric above him and, glancing toward the edge of the hill, he could see little puffs of blue smoke.

Two men were in sight and they fired their rifles several times. Luckily none of the bullets struck Tommy or any vital part of the plane. As he was moving at a speed of more than a hundred miles an hour, the men with the rifles did not have the plane within range very long.

Fearful that a bullet might have damaged his new ship, Tommy banked, swerved away from the hill, and zoomed out of the valley. He did not have time to think about the significance of the attack, nor of the plane and cabin being there beyond the end of Splitneck Canyon.

Tommy carried out his original plan and, when he came volplaning over the firs and set his ship down in a perfect three-point landing, a number of neighbors were gathered around to welcome him.

After the first load had been distributed and his plane had been covered with canvas, Tommy's mind went back to the affair in the valley. He had intended to say something to old man Nesbit, but decided to wait a while.

A new and startling idea had come to Tommy. If these mysterious strangers had been long in the valley above Splitneck Canyon, perhaps after all his Dad had not killed Wickers. But he was forced to dismiss the thought, because he believed that the only means of entering the valley was by airplane.

After a period of quiet, during which it seemed that peace might be restored between the cattlemen and sheepmen, the war flared again more bitterly than before. One morning a hand-printed notice appeared on a tree near the spring, at the entrance to Splitneck Canyon.

The notice read:

KEEP SHEEP OUT OF CANYON.  
WE MEAN BUSINESS.

**A**NGRY sheepmen held a meeting that day on Saddle Mountain. They blamed the cattlemen. Led by a fiery Scotchman, John McLaughlin, they announced that the notice would not be heeded.

Instead, the sheepmen posted a notice of their own. In this they ordered the cattlemen to clear the Splitneck Canyon meadows of all cattle.

"It's fifty-fifty," declared McLaughlin. "This is the first time the cards have been put on the table. Now we'll fight. We'll shoot every steer that's run in the canyon meadows and we'll run our sheep the same as usual."

Tommy learned with dismay of the latest development. He called on old man Nesbit and talked with him.

"It's strange," said Nesbit, "that if some of the cattle owners got together and put up that notice, I didn't know about it. Now there'll be plenty of hell poppin'."

Tommy had another worry. With the flaming up of the sheep and cattle war, personal feeling began to be manifest. On his way home from Nesbit's ranch, the old familiar cry of contempt came from the woods above the trail.

"There goes old Baa-Baa!"

Tommy had hoped that name had been forgotten. But at any rate he was getting ahead, for he had made a second payment on his airplane. He had been to see his Dad in the jail at Astoria and had told him of his belief that Wickers had been killed mysteriously.

Andy Carew's eyes had lighted up and he had gripped Tommy's hand hard. When he learned of Tommy's new business, he laid his hand on his shoulder and told him how proud he was to have such a son.

"Keep a stiff upper lip, Tommy," he advised when they parted. "Right's right and it'll always come out."

Thinking of his burned plane and Tad, Tommy wasn't so sure, but he smiled and left the jail feeling as if he had indeed become a man.

So he made up his mind to ignore the spiteful jeers. He was too busy to be annoyed.

When Tommy took off for Astoria late in the afternoon, he glanced down before he started the long climb that would carry him between the humps of the mountain. In the first of the series of meadows in Splitneck Canyon, he saw moving bunches that looked like animated gunny-sacks.

The queer idea bore fruit some time afterward, although Tommy did not think of it again for several days. The moving bunches were sheep. Tommy judged that there were several hundred in the flocks. The sheepmen were defying the notice that had been posted

on the tree. They were filling the canyon meadows. Tommy wondered what would happen.

He took off for the return to Saddle Mountain with plenty of time to land before darkness, but a loose wire connection forced Tommy to return to the landing-field at Astoria. It was dark before he had the wire fixed, but that did not worry him.

Bright gasoline lights had been fixed at the four corners of the Saddle Mountain landing-field. By this time Tommy knew every bump and wind drift around the peaks. Bringing the Golconda down was as easy for him as driving home over some familiar ground road.

Tommy held the Golconda to 6,000 feet until he had sighted the four lights that marked off a little square on the mountainside far below. He was looking over the side of the cockpit and his hand had just moved to push the stick forward to volplane, when he saw a row of what looked like red sparks down over the Splitneck Canyon meadows.

Tommy knew instantly that they came from the exhaust of another plane. It must be close to the ground, he thought, for the exhaust seemed to come from the tops of the trees around the canyon meadows.

Then something happened.

Under the mysterious plane a ball of fire grew into a great mushroom of flame. Then there was another ball and another, until Tommy had counted a dozen flashes. When the first ball had rolled its mushroom, Tommy had idled his engine and, as each successive ball flared out, a dull boom came up to him.

Tommy had watched the bombing practise at the military flying field in the city enough to know what those balls of fire meant. An airplane was down there in the canyon dropping bombs. For a few seconds Tommy was puzzled. Then he thought of the sheep.

The flocks that had been driven into the canyon that afternoon were being killed with air bombs.

The plane below him was climbing. Tommy could see that red exhaust coming closer. He gave the Golconda the gun and dived toward it, but it was impossible to do anything in the darkness and Tommy pulled stick to avoid collision.

It was luck that he had straightened out. The other plane roared by so close that wing-tips almost touched. Tommy shuddered to think what would have happened if they had crashed head on.

Glancing down again, Tommy saw lights moving across the meadows. The sheepmen were probably attempting to collect their scattered flocks. Tommy banked and tried to follow on the tail of the other plane, but in the darkness it had disappeared. After a few minutes of fruitless circling, he nosed down, gliding safely into the square marked off by his landing lights.

**T**OMMY thought he should go up the trail and see what had happened, but he waited to have his supper. He was just getting up from the table when several men appeared at the cabin door. McLaughlin, leader of the sheepmen, called Tommy.

"Come on outside," he requested. "We've got something to ask you."

Wonderingly, Tommy stepped out.

"Didn't you come down in your plane a little while ago?" demanded McLaughlin.

The other sheepmen stood silently to one side, eyeing Tommy coldly.

"Why, yes—just got back from Astoria. I was late—say, I saw—"

"Never mind what you saw," cut in McLaughlin. "Go search his plane."

Then it flashed over Tommy that the sheepmen suspected him of having bombed their sheep. They knew he had been close friends with Nesbit and for all the name he had been given, his Dad was still in jail,

charged with killing a sheepman. He was troubled.

Although nothing was found in the plane except the stores that Tommy had brought from Astoria, the sheepmen were still unconvinced.

"I tell you there was another plane," insisted Tommy. "It's probably the black-winged plane that's been over in the valley above the canyon. There's a cabin in there and—"

"You're crazy," jeered one of the sheepmen. "A mountain goat couldn't get over that ridge at the head of the canyon. I don't believe there was any other plane. Somethin' funny about you havin' all the money to buy an airplane in the first place."

McLaughlin interposed.

"Maybe Tommy's telling the truth," he said, even though his tone was doubtful. "I'd say if he is that it's up to him to get busy and nail them fellows that has the other plane. Funny, we ain't never seen no other plane around here, 'ceptin' the one that mail flyer fell down in."

While McLaughlin was speaking, Tommy decided what he would do.

"I'll tell you," he said. "I'll try and find out more about that other plane. I'll show you there's a plane there. I'll get down into that valley if I can. If any plane can land there, I can get the Golconda in."

Finally the sheepmen agreed that Tommy should have his chance to prove there was another plane, but Tommy could see that most of them still doubted his story.

In the next few days Tommy had added reason for worry. All of the sheepmen refused to have their supplies delivered in the Golconda and almost half of Tommy's air business fell off.

On the next trip to Astoria Tommy stopped and bought himself an automatic pistol. At first he had thought that he would have some one go with him in his investigation of the valley. Then he decided that whatever the mystery of the black-winged plane

might mean, it was his job to find out. When he landed in the hidden valley, he would do so alone.

Two men with rifles stood on the trail that overlooked the meadows of Splitneck Canyon. They were guarding the sheep that were still in the meadows and they looked accusingly at Tommy as he went up the narrow trail past them.

Tommy spoke pleasantly to the sheep guards, but they only scowled and did not answer. In the meadow below a number of men were at work loading dead sheep

carcasses onto the crude sleds that served for field transportation.

The dead sheep lay massed together. Some of the bodies had been badly torn by the bombing of the previous night. Here and there a deep pit had been dug in the ground by the explosions.

Saddened and feeling a little sick at this gruesome sight, Tommy went quickly on up the trail. But he had something on his mind, something that he thought might have a connection with the bombing.

**H**E felt of the automatic pistol slung in the holster under his left armpit. He had made the trip to Astoria early in the morning for the purpose of buying that gun. He might have sudden need of it, he imagined.

Splitneck Canyon extended for about three miles above the spring where the cattle had been poisoned. But the trail along the cliff ended about two miles up. The bottom of the canyon was a series of meadows, separated from each other by narrow passes where the walls of the canyon jutted toward each other.

In one of the upper meadows Tommy saw a herd of cattle. No one was guarding them and he wondered



"You'll have to come along with us."

what the sheepmen would do about it. The canyon had always been safe enough for cattle, for, when they were driven into the meadows from the lower end, there was no way out. Calves were not run there and the few stray cougars seldom attacked a full-grown steer.

The last mile of the canyon was tough going, but there was a rough cattle track that led from one meadow to another. Tommy came at last to the wall of the ridge at the head of the canyon. Looking up, he remembered the words of the (Continued on page 41)



# My Greatest Thrill

The Actual Experience of a Mail Pilot Who  
Flew Through a Myriad of Birds

By  
Pilot EUGENE  
JOHNSON

As told to  
JACK BELL



**I**N March, 1921, Pilot Eugene Johnson took off from San Francisco. There was a thick fog, leaving twenty scant feet of ceiling over the Bay. There was no earthly chance to get out of the rolling mists. His wonderful skill stood him in good stead. He cleverly dodged the ferry boats, steamers and smaller craft as he zigzagged his perilous way over the incoming tide.

Gulls screamed and passed between the wings. Geese honked and scattered up into the air, as the terrible, drumming Liberty tore through space between water and fog.

On swept Johnson's ship, a bird of gigantic, terrifying appearance to the living, feathered tribe. It barely missed the masts of a water craft. There was the nerve-racking, thudding, resounding roar that is one of the most painful experiences to be encountered flying under the density of fog, in which sound is so closely confined and multiplied.

After getting as close to the outlined shore line as safety permitted, Johnson noted points along the beaches indicating that he would soon be well toward Suisun Bay. The clouds began to lift a trifle and there seemed to be a ceiling of about thirty feet.

It was then that millions of water fowl started on their flight as the thunder of the approaching ship tore through the edges of the heavy fog, throwing back eddies and rolling, tumbling mists, as the ship swept on. The great worlds of ducks, geese and brant began darting about in confusion. There wasn't a bit of space that was not literally alive with screaming fowl.

Johnson did not have a chance to go around the countless thousands. He tried. He wasted many valuable minutes in his endeavor to find an outlet without crashing into the clouds of birds. He even turned his ship. It was, to paraphrase, "ducks to the right of him, ducks to the left of him, and ducks in front and behind him."

He throttled down. He gave his ship the gun. He tried every way of avoiding disaster, even to taking his ship up into the deadly mists, so thick that it was difficult for him to make out his wings. The long spurts of flame coming from the exhausts merely added to the stampede and screaming of the water birds. He was up against it. He was now outside of striking

distance of the shores, at the narrow point of Suisun Bay. He took that thousandth chance and slammed his ship with open throttle into the mass of web-feet.

Squawk! Bang! They whammed against the wing wires. The feathers and blood of the hundreds of birds he struck covered the wings; then he was out on the narrow edge of the Bay. The lights began to show through the thinning and rising fog. Then out of the gloom and danger zone, he headed his gigantic bird up and up into the altitudes.

Luck was with Johnson. He had torn into the clouds of feathered tribes at 120 miles an hour and the only thing that carried him through was his metal propeller.

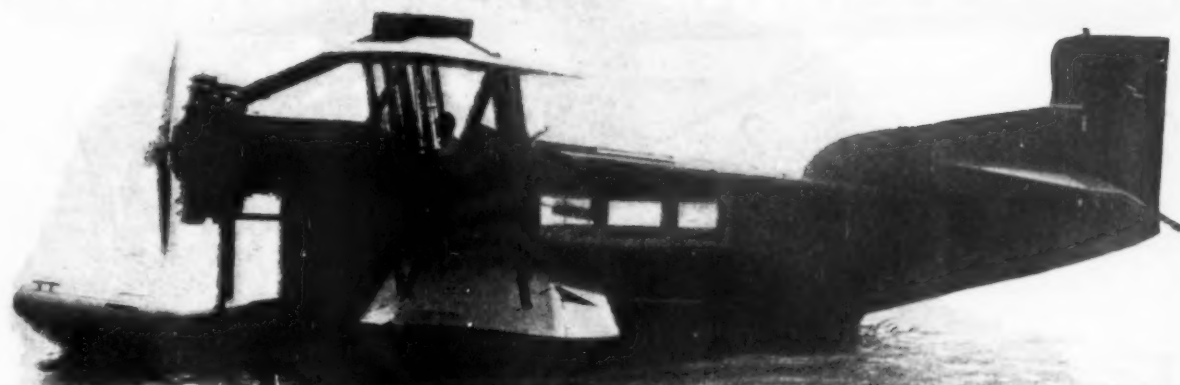
When he landed at Reno his ship was in ropes of white and brown, each and every wire festooned with downy, fluffy, soft hair from under the feathers of the birds. The hairs were fairly cemented to each and every part of the ship by the spattered blood of the victims of the massacre, a tragedy of the high ether. The ship looked for all the world as though it had been beautified by a master decorative hand. The hood and goggles of the pilot were fuzzy with down and small feathers and so was the neckband of his flying suit. The bottom of the cockpit was plentifully carpeted with feathers.

**W**HEN Johnson set down at the field, the field staff as a whole hurried to the ship. A number of visitors trailed behind the running crew. In the air the plane was a beautiful thing with the sun's rays full upon it. Closer inspection dispelled the illusion of beauty. The wires were like ropes; parts of carcasses were hanging in almost every place where there could possibly be an anchorage for a twenty-five-cent piece. Streaks and gruesome red smears fairly covered wings and body. On the blade of the propeller, an inch or so from the hub, were tiny specks of down which told the story of hairbreadth escape of pilot and ship.

"It was a perilous situation for me and the ship alike," said Johnson when he stepped from the plane and walked about it in amazement.

"The 156 was never dressed up like that before and never will be again if I can help it. Through my goggles, she looked like a South (Continued on page 45)





Win a  
Model of this  
Plane

Write a Letter  
and  
Win a Prize

# WHY I Am Interested in Aviation

**M**ODEL AIRPLANE NEWS wants to know why you are interested in aviation and to find out we are going to give away three wonderful prizes to the ones who write us the three best letters telling us their reasons.

All you have to do is to write us a letter telling why you are interested in aviation and if your letter is judged by the Editor of MODEL AIRPLANE NEWS as one of the three best, you will receive one of the following prizes:

## FIRST PRIZE

A three-foot Flying Model of an  
Amphibian Plane

## SECOND PRIZE

A copy of the book "Building and  
Flying Model Aircraft"

## THIRD PRIZE

One year's subscription to  
MODEL AIRPLANE NEWS

The decision of the editor is to be final and the age limit is nineteen. Boys or girls over that age are not eligible for this contest. Neatness and correct spelling will count, so watch your "I's" and "Q's". Tell in your letter why you like aviation; which branch you care for most and give your reasons.

Address all letters to:

The Editor,  
MODEL AIRPLANE NEWS Contest,  
Macfadden Publications,  
1926 Broadway,  
New York.

In the October issue the winners will be announced and the prizes will be sent to them. If possible we will print the pictures of the winners with the letters which won the prizes.

So go to it! Every boy or girl within the age limit has a chance to win! Get your letters in early, so that the winners can be picked in time to be announced in the October issue. The contest closes on August 1, 1929, at midnight. Letters received by the Editor after that time cannot be considered, so mail your letters early!

Let's go!

# MACFADDEN AVIATION ADVISORY BOARD

*Don't you know?*

*Ask us!*

**F**OR those who were unlucky enough to miss our July issue, we are going to repeat our introduction of last month, so that none of you fellows can tell us later that you didn't know what it was all about.

We have had so many letters asking for information on model building and on aviation in general that it has been decided to conduct a department in which our readers may have their questions answered and obtain solutions of the problems which arise in model building and the study of aviation.

For this purpose the Macfadden Aviation Advisory Board will conduct this department each month in **MODEL AIRPLANE NEWS**. This Board consists of a chairman and three other members who will meet at necessary intervals to discuss and endeavor to answer all questions. All answers will be accurate and authoritative.

Captain Edwin T. Hamilton, Editor of **MODEL AIRPLANE NEWS**, will act as chairman of the Board. Captain Hamilton served with the Royal Air Force during the War, being the youngest commander of the London Defense Squadron at that time. He has been active in aviation since then in the United States and Brazil.

Mr. Jack B. Stinson, president of The Stinson School of Flying, is a member of the famous Stinson "flying family." He has fourteen years of flying to his credit and has flown more than two thousand hours. Mr. Stinson's wide experience in all branches of aviation ideally qualifies him for this Board. He is an expert on the subject of aviation instruction.

Mr. Frank J. Tietsort, noted science and engineering writer and aviation authority, was elected honorary member of the First Pursuit Group, United States Army Air Corps in 1925, by unanimous vote of its combat flying officers, for advancing the cause of American aviation. Mr. Tietsort covered the arrival of the Army World Flight in Labrador in 1924 for 550 newspapers. At the request of his friend, Brigadier General William Mitchel, then Assistant Chief of Army Air Corps, piloted by Lester J. Maitland, who negotiated the Honolulu flight over the Pacific in 1927, he made a 7,000-mile trip over the United States to report the

**I**N this department each month the Macfadden Aviation Advisory Board will endeavor to answer all questions concerning model building and aviation in general. Address all questions to

The  
**Macfadden Aviation Advisory Board,  
MODEL AIRPLANE NEWS,  
1926 Broadway,  
New York City.**

**Enclose with your letter a self-addressed and stamped envelope to facilitate an answer, as space is limited and all letters can not be answered in these pages.**

conditions of flying fields and stations of the Army Air Corps. He has probably flown more miles than any other civilian in the United States.

Mr. Theodore T. Hazlewood served with the Royal Air Force during the War. He is a graduate of Yale University and enlisted as a Cadet in Canada. He served overseas as a flying officer, where he made an enviable record.

So here they are! Jack and Ed, and Frank and Ted are mighty glad to meet you and are more than anxious to help you in every way they can. A good gang, aren't they, fellows? It isn't often you can hear directly from such fellows. But you can from these. They are just waiting to write the minute they hear

from you, so write your letters. Ask any question you wish and watch the next issue of **MODEL AIRPLANE NEWS** for your answer from your four new friends, who are anxious to help you.

Here is how it's done. Write any question you may wish to have answered concerning aviation or model building to:

Macfadden Aviation Advisory Board,  
MODEL AIRPLANE NEWS,  
1926 Broadway,  
New York City.

In order to help them in their answer to you, enclose a self-addressed, stamped envelope with your letter, so that if they cannot answer all the questions in the magazine, they will send you a personal answer by mail as quickly as possible.

So here goes!

Bobby Morse of Roswell, N. M., writes:

*I want to build a model airplane, but do not know how to cover my wings. Will you please tell me what to use so they will be tight.*

**Answer:**

Buy rice paper. After covering the wings, paint them with bamboo varnish, which will draw the paper tight as a drum and make the wings water-proof. You will find this method satisfactory. (Continued on page 44)

## The Flying Black Sheep

(Continued from page 37)

angry sheepman, that a mountain goat could not get over that ridge.

Tommy's hunch was that some one had been over it. He believed that there was some kind of trail that could be followed from the canyon to the mysterious hidden valley where the black plane made its home.

For more than an hour Tommy examined the base of the ridge. Some of it lay covered with windfall trees and thick brush. At no place could Tommy find a break through which to begin a climb of the almost straight-up-and-down wall of the ridge.

Tommy started back down the canyon, following the side opposite that on which the regular trail came up. Thick brush grew along the base of this hill, but it was not so steep as the ridge that closed the end of the canyon. At last Tommy found a scar in the rocks, where he could climb up.

**T**HINKING to get up as high as possible where he might see some break farther up in the ridge at the canyon end, Tommy scrambled into the scar and by hard climbing, reached a point about 200 feet above the bottom of the canyon. He found that by being careful he could edge along toward the ridge.

At this point appeared stones which had been loosened by the weather from the bigger rocks. Tommy had started across a strip of this crumbling rock when he slipped.

Turning completely over, Tommy found himself shooting down the steep hill on his shoulders. He was scratched and bruised when he landed in the brush at the foot of the hill. He scrambled to his feet and started pushing his way through the brush.

Just as Tommy caught hold of what looked like a solidly rooted bush, it pulled loose. Then he saw that a whole pile of brush had been cut and placed so as to counterfeit the other bushes growing around.

When he had pulled the brush away, Tommy found himself standing before the entrance of a wide-mouthed cave. The floor was smooth and, under the piled brush, a short trail ran into the last of the canyon meadows. But the discovery of the cave was not what caused

Tommy to utter a low whistle of amazement.

The floor of the tunnel entrance was marked everywhere with cattle tracks. Before he went into the cave, Tommy made his way through the loose brush until he came to the edge of the meadow. The grass grew thick here, but the entire meadow had been trampled by feeding cattle and a man in the meadow would have had no reason to suspect that cattle had gone through the apparently thick brush into the hillside.

Smooth of wall, with a roof that rose high above, the tunnel ran for a short distance into the hill, then Tommy saw that it curved abruptly toward the ridge at the end of the canyon. After he had rounded this curve, the tunnel grew pitch dark and Tommy had to strike matches to see his way.

When he had traversed possibly half a mile under the ridge, Tommy glanced at his new wrist-watch and found that it was after six o'clock in the evening. With only matches to light his way, he decided it would be best to go no farther.

As he started to return to the outside, Tommy wondered if he should tell Nesbit or some of the others and get help before exploring as far as the end of the tunnel. Then he thought of what the sheepmen had accused him and determined to ferret

this thing out alone if possible.

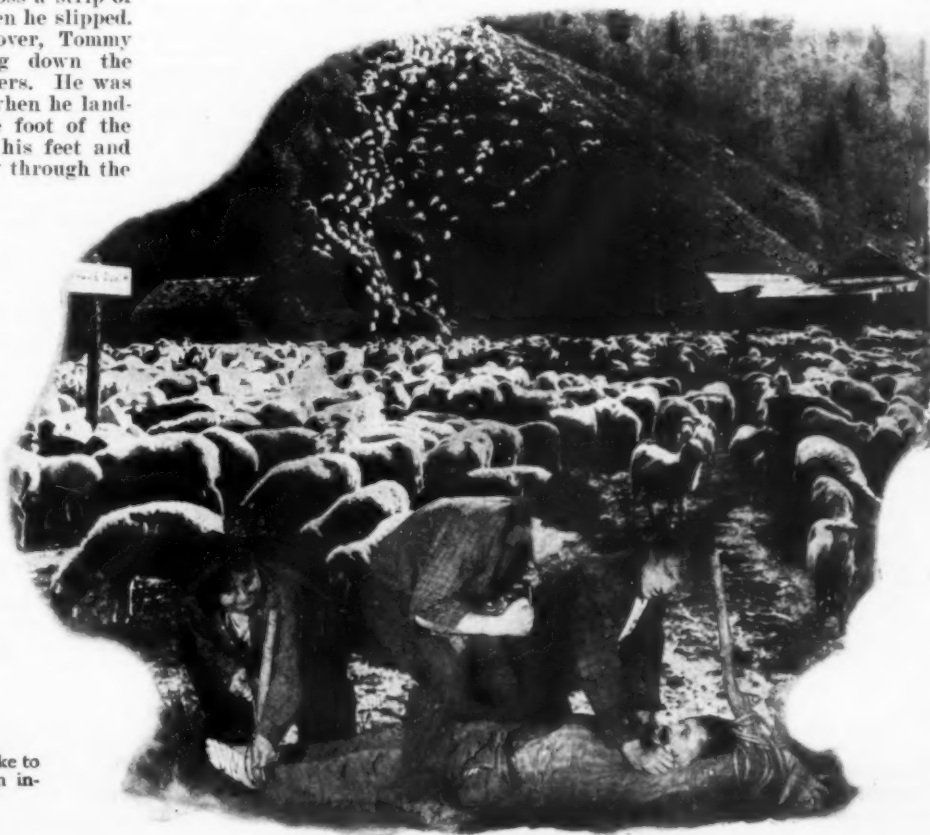
Tommy did not know whom he could trust. Perhaps some of the very men who had accused him, or some of the cattlemen themselves, had discovered this tunnel. Then there were Wickers' mysterious visits to the upper canyon. Perhaps he had known of the tunnel.

Tommy carefully replaced the loose brush over the tunnel entrance. It was growing dark and he hurried back through the canyon. When he passed the place where the sheep guards had been, they were gone, but Tommy could hear men shouting among the sheep in the meadow.

Did the black plane have a lighted landing-field? Tommy was sure it must have or it could not have been flying at night. He decided to have a look. Lighting his own beacons, he took off in the *Golconda* about an hour after his return from the canyon.

**T**HIS was unwise on Tommy's part. He should not have gone alone at night, or at least he should have informed the sheepmen of his flight. Being wholly innocent of the bombing, it did not occur to Tommy that this night flight would look suspicious. He did not think that possibly the sheep might be bombed again.

His guess had been correct. After



"He'll find out what it's like to be blown up with them infernal machines."



he had climbed to a safe altitude, about 2,000 feet above the mountain, between the humps, Tommy straightened out and sent the Golconda in a wide circle around the location of the hidden valley.

Surely enough, lights similar to the four-square beacons on his own field twinkled far below. At night the mysterious valley looked like a great black hole in the ground. Tommy was wondering if the plane was somewhere in the air and had idled his motor the better to hear, when the broad, black wings crossed in the moonlight directly ahead of him.

Banking the Golconda and standing it almost on one wing-tip in his haste, Tommy started to get down on the tail of the black plane. But to his disappointment, he found that the black plane was too speedy for him and the spit of its exhaust quickly became a distant spark.

Tommy caught his last glimpse of the black plane's exhaust just before its motor was cut out for the landing; for, within half a minute after the black plane had hit the ground, the four landing lights winked out.

Turning toward home, Tommy wondered where the other plane had been this time. He was soon to find out. As he glided low over the firs and slid between his landing lights, he saw a group of men at the far end of the field.

McLaughlin led the sheepmen who came striding toward him.

"You'll have to come along with us," said McLaughlin in a hard tone. "Guess there ain't much doubt about it this time—an' one of your bombs got Struthers. Looks like you'd follow your Dad to the gallows."

**T**HE astonished Tommy was seized by two of the sheepmen.

"You bet we're right," growled one of the men. "Lookit this."

He had felt the automatic under Tommy's armpit and he pulled it out.

"You can't tell me that anybody but a killer would tote one of them things."

The sheepmen took Tommy to McLaughlin's cabin where two of them volunteered to guard him until Sheriff Higgins could be notified. It was true; Struthers, one of the shepherds, had been killed by the bombs.

Tommy tried to tell the sheepmen where he had been and what he had seen, but they refused to listen to his story.

Even the old Scotchman, McLaughlin, who was always fair, had a dour look.

"I'd like to believe you, lad," he said, "but you'll have to think up somethin' more likely than the yarn of a crazy valley. I've been here all my life and there ain't no such place."

Young George Struthers, a brother of the man killed by the sheep bombers, volunteered to go for the sheriff. Finding that nothing he could say had an effect, Tommy

lapsed into silence. But his mind was working with a new clearness.

It looked as if he had been caught in a trap that was not of his own making. It came to him that perhaps the circumstances that had seemed to convict his father of the murder of Wickers were of the same pattern.

Tommy recalled that even he had believed his father guilty after he had found Wickers' body and then come upon his father cleaning his deer rifle. He could not hold it against the sheepmen for thinking that he had dropped the bombs, when they believed his plane to be the only one on the mountain.

But Tommy was to get a quicker break of luck than his Dad. Young Struthers had started for Astoria early in the morning of the day after Tommy had been made a prisoner. It would be more than a week before he could bring the sheriff.

**L**ATER that day, nearly a score of the sheepmen had collected around McLaughlin's cabin. All were armed. Then Tommy heard that Nesbit was getting the cattlemen together. They were hurrying from their scattered ranches and gathering at Nesbit's place.

At last the sheep and cattle war was coming to a climax. McLaughlin himself feared that before Sheriff Higgins arrived there would be a clash that would give the sheriff a much bigger job than taking Tommy to join his father in the jail at Astoria.

But the day passed and night came again without any undue excitement. Tommy learned from the talk around him that most of the sheep had been removed from Splitneck Canyon. But two or three flocks remained. Their owners figured that with Tommy a prisoner, the danger was past.

Tommy had removed his boots and was lying on a blanket that had been spread for him on the floor, when he was brought to his feet by a dull, booming jolt. Before he could reach the door where the men guarding him were sitting, another distant explosion rattled the windows of McLaughlin's cabin.

Forgetting Tommy, the two guards rushed outside. Tommy heard the sheepmen shouting to each other and then their footsteps died away. Four more explosions sounded within the following minute or two. While Tommy deeply regretted the further bombing of the sheep, at least he was glad that this third attack upon the meadows could not be laid on his shoulders.

Either the sheepmen who had been guarding him thought the same thing or in their excitement they had forgotten their prisoner. Tommy found himself free to go. Instead of turning toward home, he followed the sheepmen toward the canyon.

The men ahead of him had gone down into the meadows when they reached the spring, instead of following the trail along the cliff. Above

him Tommy heard the roar of the black plane's propeller. Apparently it was still circling around over the canyon.

Just as he came to the spring, Tommy saw a match flare up some distance away up the trail. He thought some of the sheepmen were there and went on along the path. In the moonlight below him he could see the dark figures of men among the sheep in the lower meadows.

Three men were talking together on the trail when Tommy came to the spot where he had seen the match lighted.

One of the men, a sheepman by the name of Spuggs, swore savagely.

"I'm tellin' you it don't make no difference—he ain't in that plane o' course, but that's one o' his pals, that's what it is."

"I'm thinkin' the same thing," growled one of the other men. "That Nesbit an' the other cattlemen framed this. They bought that rat of a Tommy his plane an' then they got some one else to finish the job."

"I'll bet they'll go after the sheep in that upper meadow," said the third man. "I'll bet you that's what that flyin' fellow is huntin' right now."

**T**HE steady drumming of the plane's motor still sounded. The plane seemed to be cruising high up along the rim of the canyon.

"By heavens! If we had that Tommy here now we'd give 'im a taste of his own medicine. We'd put 'im—"

Spuggs, who was speaking again, cut his words short. One of the other men had struck a second match to light his pipe and in its flare the white face of Tommy loomed out of the darkness close beside them.

Spuggs grunted something to the other men in an undertone. Before Tommy could retreat, Spuggs and one of the other men sprang upon him. A rough hand was clasped over his mouth and he was thrown to the ground. Before he could make an outcry, a handkerchief was substituted for the hand.

With the muzzle of a rifle in the middle of his back, the three sheepmen drove Tommy ahead of them up the trail. Tommy could not understand what they intended to do, but he was scared. He knew that this man Spuggs and the others with him were probably the most ugly of all the sheepmen. He knew, too, that Spuggs had married the sister of Struthers, the man who had been killed.

A full moon slipped along through ragged clouds. It went under a cloud mass that promised to keep it hidden for some time. Tommy could still hear the black plane's motor thrumming on the night. He thought that they were perhaps waiting for the moon to reveal the sheep in that upper meadow before they started bombing again.

(Continued on page 41)



# A Supreme Achievement in a Model Plane

## The RED ACE

Combat  
Pursuit  
Ship

BOYS!  
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This  
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TREMENDOUS  
VALUE ! ! !

### Rises from Ground—Soars 60 Feet

The development of the Red Ace Combat Pursuit Ship will be nothing short of sensational in the world of model planes. Here's one plane that will not disappoint you—one plane that will perform like a real ship. Has wing spread 16" with main fuselage stick 14"; reinforced main wing; perfectly balanced tail wing and adjustable rudder. Main wing can be shaped to suit conditions. Has front landing gear and rear skid. The perfectly carved, 7" wood propeller is a particularly fine feature. Has ball bearings on propeller shaft; 6 ply motor of newly developed extra strong para rubber. This is not a construction set, but a completely assembled plane. Simply fasten wings and launch.

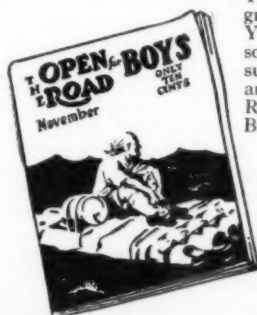
### Will Outperform Planes Costing Much More

The Red Ace will rise from ground under its own power. Will climb easily to 60 feet. Will soar over rooftops and buildings. Then, glide perfectly to earth. This large-sized, carefully made plane will outperform many planes costing 5 times more. It is guaranteed to fly. It is guaranteed to rise from ground under own power. This plane will please any boy immensely. A perfect marvel of simplicity and powerful performance. Whether you now own a model plane or not, whether you own 50 model planes, you will want the Red Ace. It will be the prize ship in your hangar. Don't let a day slip by until you order this plane, that's if you want real flying performance.

### You May Have This Plane FREE!

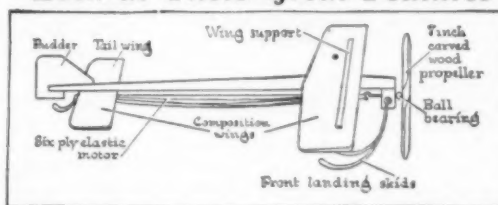
The Open Road for Boys Magazine has 50 pages every month crammed with thrilling, breath-taking stories that will hold you spellbound. Just the kind of stories you've been looking for. Interesting, tense stories of high adventure on land and sea and in the air. Tales of deep mystery. Airplane stories, the best published. Sport stories, stories of school life. Marvelous departments and special instructive articles. Lots about model planes.

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Order →  
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Name.....  
Street.....  
Town or City.....  
State.....

(Continued from page 42)

Opposite the last meadow in which sheep had been placed, Spuggs and his companions turned from the trail, pushing Tommy ahead of them down the steep hill. Huddled sheep came into view when they neared the bottom of the canyon.

"Cut a long stake," ordered Spuggs, "an' find a piece of rope."

Tommy was puzzled. He had at-

tempted to talk and had been told to shut up. What did Spuggs intend to do with him?

Not until after they had tied his hands behind him and bound his ankles and carried him close to the huddled sheep did the full horror of their intention burst upon him.

"Now if that pal o' his in the plane comes back, he'll find out what it's like to be blowed up with them

infernal machines," growled Spuggs.

*Will the next dropped bomb mean death to Tommy or will he be spared that he may save his father's life and explain the mystery of the hidden valley? Read the further exciting developments of this thrilling story, "THE FLYING BLACK SHEEP," in the August issue of MODEL AIRPLANE NEWS.*

## Macfadden Aviation Advisory Board

(Continued from page 40)

Philip Jackson of Buffalo, New York, writes:

*My friend and I had an argument over who was the first man to fly an airplane. I said Mr. Wright and he said Mr. Langley. Which is right?*

Answer:

You're right, Phil! Samuel P. Langley gave up trying to fly after his third failure on December 8th, 1903. Just nine days later, on December 17th, 1903, Orville Wright made the first flight in a power-driven airplane. Good for you, Phil!

William Fosset, writes:

*What is the best kind of wood for me to make a propeller for my model airplane?*

Answer:

Use white pine. Be sure it is thoroughly dry, Bill.

Billy West, Dallas, Texas, writes:

*Will you please tell me the best kind of rubber to use for models? Round or flat?*

Answer:

Use pure Para rubber. Get the flat rubber, Billy. It has a third more power and gives twenty-five per cent. more turns than the square.

Gentlemen:

*I have a Curtiss Jenny, three-foot flying model that I bought in knocked-down form. Upon getting this model complete as the instructions called for, I found that it would not fly at all. The best it can do is to run along the ground for about fifty feet. Is there some way that this model can be made to fly?*

MARTIN DEMPSEY,  
Chicago, Ill.

Answer:

The data that you have outlined in your brief letter does not contain enough information for us to know how to answer you. Although you may have built the model as instructed, there may be some defect in the position of the wings, or possibly you have not enough power in the rubber strands to lift the model. Try hand launching.

Here we have a letter that came to us all the way from London. We like to hear from our English friends.

George Willis, 64A Firth Street, London, England, writes:

*I have been unable to buy a decent air-compressed motor in all of London, as most of these motors are manufactured either in America or France. I wish that you could give me the address of a manufacturer that has a worth-while, air-compressed motor over there in America. I have a 54-inch DeHaviland Navy Torpedo Model weighing twenty-one ounces. This model works very well under rubber motive power, but as I have enough sovereigns saved up to purchase an air-compressed motor, I believe I could purchase a fairly decent one in your country. May I hear from you as soon as possible as I am anxious to get this motor?*

Answer:

We are pleased to hear from you, particularly since you live so far away in London.

We are giving you the name of a manufacturer who has recently placed a new compressed-air motor on the market. Apply to The Miniature Aircraft Corporation, Low Terrace, New Brighton, New York. They are in a position to supply you with a reliable air-compressed motor.

Gentlemen:

*Will you kindly settle an argument between my friends and be the judge in this case. We are forming a Model Airplane Club of 14 boys in our class. Our teacher, being unfamiliar with aviation, has decided not to enter into the argument, so we want you to give us an answer to this question.*

*When a club is formed, is it right to call the head or president by a name or title such as Commanding Lieutenant or Captain of Flight, and the members, pilots or cadets?*

*They have given me the name of President of the 5th Grade Model Aviation Club and I know this is wrong.*

*Kindly answer through your magazine. Thanking you in advance, I am*

Very truly yours,  
EDGAR SMITH,  
Richmond, Virginia.

Answer:

You are right. It is better to call the member at the head of a club by titles such as you mention. These could be titles such as Flight Commander, Squadron Commander or Captain of Flight, etc.

Howard Emerson of Pittsburgh, Pennsylvania, writes:

*How can I fix the rubber-band motor on a model after the model is completely covered? The rubber band in my model snapped the other day and I have been wondering how I could change it without doing much damage.*

*An early answer will be appreciated.*

Answer:

Secure new rubber for your model. Determine the length between propeller shaft and rear hook by measuring the length from outside of the fuselage. After you have the exact measurement, cut a square hole at the tail end on the under side of the model where your cross-pieces are joined together. This hole will then allow you ample space to take the old rubber out and insert the new rubber on the rear hook. Hold the model tail upward, so that the rubber will fall through to the propeller shaft, directly beneath on the under side of the fuselage. At the motor end cut out another hole. This will enable you to hook the rubber to the propeller shaft and afterward the holes can be closed up by gluing new covering at these two places.

Gentlemen:

*Near my town there will be held a Model Airplane Contest that will give the winner a silver cup and cash prizes at which I would like to have a chance. I have built two models before and they were the Spirit of St. Louis and a Bremen. These models I bought in New York City when I was there last summer. Both of these models were broken, however, and I would like to build a new one to enter into the contest. I want a scale model, not a feather-weight. Will you kindly write me what type model you would build if you entered the contest?*

Yours truly,  
JACK BURNS,  
Buffalo, New York.

## Answer:

There are quite a few scale models that you can build with ease, having had previous experience in building the Spirit of St. Louis. Why not go to work on the same type of model, using greater care and eliminating as much weight as you can to assure yourself of a better chance to win a prize.

H. Wieden of 102 Avenue S, Brooklyn, New York, writes:

*I am a subscriber to MODEL AIRPLANE NEWS, being one of the first to get this wonderful magazine.*

*What I would like to know is when I can enter and join a club? In my locality the boys*

*are not yet thinking of a club, but I would like to join one so that I may get first-hand information at all times. Thanks.*

## Answer:

We have recently incorporated a club by the name of MACFADDEN SKY CADETS. This gives you a good chance to organize all the boys in your section of Brooklyn into a branch of this national organization. There are many benefits for its members, as this organization is continually investigating and studying all the principles of model airplanes. We suggest that you fill out the coupon which you will find in another part of the magazine. We feel sure you will be interested.

## The Macfadden Sky Cadets

(Continued from page 13)

model-airplane building and flying in the MACFADDEN SKY CADETS, for which you will be given a badge of honor, will constitute an entrée into air circles all over the world.

Plainfield, N. J., has earned the distinction of having given the first impetus to this national movement. At a meeting held by the Chamber of Commerce of Plainfield to discuss plans for a model-airplane meet, which they proposed to hold on Memorial Day of this year, the question of national organization came up. A representative of Mr. Macfadden who was present—Captain Edwin T. Hamilton, who was himself the youngest commanding officer in the Royal Flying Corps during the World War—told of the great interest Mr. Macfadden had in the future of flying and air transporta-

tion, and it was decided to present to Mr. Macfadden, who has always had the interests of the growing generation at heart, a proposal that he found a national organization of model-airplane clubs. Before that meeting adjourned the initial chapter or "flight" of the MACFADDEN SKY CADETS had been organized by the city of Plainfield, with a membership of sixty-five, every boy present having signed up for membership with great enthusiasm. This was before Mr. Macfadden himself knew anything about it. Mr. Macfadden has now invested his money and his vibrant energy in the movement, and since that day, a little over a month ago, requests for membership have been pouring in from all sides.

Get on the band wagon, boys, and join the MACFADDEN SKY CADETS.

## My Greatest Thrill

(Continued from page 38)

Sea Island, but, gosh, it looks like she was getting ready to go to some great function or was all dolled up for grand opera.

"I had a hard time getting off down below. Never saw such a heavy ground fog before and it went up mighty high, too. I could see this when I emerged from the pall. I had just enough ceiling to remain above the water. At first I was too busy dodging the moving stuff in the Bay to think of anything else. All of the flyers on the run know of the ducks, geese, swans and other water fowl in Suisun Bay.

"Goodness knows how long it took me to drive through that vast sea of feathered web-foots. Believe me it was long enough.

"The sweat broke out all over my body at the thought of the destruction I was forced to bring.

"The ship was not over 100 feet from the water and was making her maximum speed, about 120 miles per hour. The propeller was doing her best 1,600 r.p.m. There was nothing else for me to do but plow through them; there was absolutely no

chance to miss the moving sea of flying life. I gambled like we all do and luckily won again.

"When I rammed into them, there were plenty of bumps, just like a rattle of heavy hail. The air was a mass of feathers that swirled by, dropping birds, and parts of them streaked by the cockpit like flashes.

"It was certainly a scene I never want to see again."

"How long did it last?" Johnson was asked.

"Probably for only a few seconds, although it seemed many minutes before I came into the sunlight and saw the high blue above me. Believe me!—I zoomed her up and took to the high places as fast as the ship could make it and the 156 was some climber, too.

"All the way to Reno, feathers and down kept blowing away from the ship. It reminded me of a fox-and-geese chase we played as kids. I felt mighty bad about it, as I am a lover of the entire bird family. Although this appears to have been wanton destruction, I had absolutely no other way out."

## Be a Leader!

DON'T follow the bunch... lead 'em. Make them look up to you and respect you. A weakling doesn't command respect, it's the husky, the he-man who heads the crowd. And no matter how small, how undeveloped and scrawny you are, PHYSICAL CULTURE can put spring into your legs, iron into your muscles. PHYSICAL CULTURE CAN FILL OUT THAT CHEST OF YOURS AND CAUSE IT TO SWELL UP LIKE A CHAMP'S. Yes Sir! For over 30 years PHYSICAL CULTURE has been developing champions.

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**C. M. THOMAS, 337 W. Madison St. #10 Chicago**



## No Excuses Accepted!

(Continued from page 9)

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It was Curly who first sighted the *New Era*, and it was in a clump of scrub oak that the remains of the giant plane lay, twisted and glistening in the sun.

"There!" he said, nearly climbing out of the cockpit in his excitement as he pointed earthward. The pilot shifted his controls and the monoplane shot down. The trio in the descending plane took in the situation quickly. It could be seen that the pilot of the *New Era*, unable to find a landing place for his heavy plane when the engines failed, had brought it down in the trees, hopping thereby to break the fall. The wreck was on the side of a rocky canyon. A figure could be seen running about the demolished plane, where several dark forms were stretched out on the ground. The pilot of the monoplane circled around.

"I can't land there," he shouted above the roar of the engine.

"We've got to get down somehow," Brown said. "There was a ranch several miles back and a field—maybe you could make it there." He glanced at his watch, then groaned.

"By the time we can land there and get back here it will be too late. What can we do?" The *Journal* plane had sighted them and was speeding up. Brown looked at Curly in desperation as though expecting him to perform a miracle.

Curly did just that.

"Give me a pencil and some paper," he shouted. Wondering, Brown complied. Then Curly cupped his hands and shouted to the pilot.

"How do you work this parachute?" he asked.

"Count ten and then pull the ring," the pilot replied, indicating the release ring.

Brown, despite the tensi-ty of the moment, laughed a trifle scornfully.

"What's the matter?" he asked. "Are you scared?"

"A little bit," Curly answered.

"You're not going to fall," Brown said as though he were reassuring a very small boy.

"No," Curly replied, "I'm going to jump."

"What?" Brown's eyes popped open. Curly rose in his seat and started to climb out of the cockpit.

"Sit down, you idiot," Brown ex-

want to wait. There was but one way to beat the *Journal* to the story. If the chute didn't work—he closed his mind to the thought. Setting his teeth he reached back and took hold of the release ring. He looked down again.

Then he let go and dropped into space. He counted to ten, probably faster than he had ever counted in his life, and pulled on the cord. For a sickening moment he continued to shoot downward. Then the wind caught in the silken folds of the chute and it puffed out with a loud "pop". The sudden check to his fall jolted him, knocking the wind from his lungs, but that did not matter. He might have had a rib broken without noticing it, so excited was he.

His aim had been perfect; too perfect in fact. As the chute settled down to earth like a huge white swan it headed straight for the same clump of trees that had snared the *New Era*. Curly tried vainly to alter its course, but the attempt came too late. While he was still a hundred feet from the ground he saw that he couldn't possibly miss the trees. He braced himself.

Just as his feet dangled above the scraggly top of an oak a sudden puff of wind jerked him to one side. It was not enough, though, to take the chute clear of the

obstacle and as he dropped down past the tree he felt a sudden pull on the straps and heard a loud ripping sound. The chute had caught on a branch and Curly was plunged to the ground with stunning force. He tried to land on his feet but the jerk had thrown him off balance.

There was a thud and a groan as his body landed on its side. One arm was pinioned beneath him. Curly lay still, stunned by the fall, with his body seemingly crushed. He wanted to stay there, to go to sleep and forget the excruciating pain and dizziness. A man, dressed in an aviator's suit, came running up. He seemed distraught.

"Isn't it enough for two men to be killed already without you breaking your neck?" he said, bending over Curly and disentangling him from the parachute. The man's words came to the dazed youth as through a fog,



"Isn't it enough for two men to have been killed already without your breaking your neck?"

claimed excitedly. "Do you want to kill yourself?"

"No," said Curly, "I want to get the story." He was afraid; no use trying to tell himself he wasn't. He was shaking like a leaf. As he peered at the ground far below he suddenly became dizzy; the pit of his stomach seemed to have taken the drop already. He couldn't back out now though.

"Let go of me," he said as Brown tried to restrain him. "I've taken lots of parachute jumps." Brown was unconvinced, but Curly shook himself free and climbed out over the side of the plane. The monoplane was directly above the *New Era* now. The pilot had seen Curly's intention and he added his remonstrance to Brown's. Curly paid no heed.

Travis had said, "You're rather young—wait awhile." Curly didn't

but they were like a lash laid on his skin. Two men killed, others probably injured, and the *Bulletin* was waiting for the story—the *Bulletin* was depending on him. He staggered to his feet, his left arm hanging limply by his side.

"Who's killed?" he blurted out.

"**B**LEWETT and Carstens," the aviator replied. He was staring at Curly. "Who are you?" he asked. Almost as he uttered the words he recognized the boy. "You're a newspaperman!" he said, almost accusingly. When he had seen the monoplane overhead he had uttered a fervent prayer of thanks, believing it to be a relief plane.

"Newspapers be blanked," he growled. "We don't want publicity, we want help. There are five men here hurt, some of them seriously. I've got them all out of the plane; now the thing to do is to get them down to civilization." He started away.

"Tell me what I want to know," Curly said, "and I'll get help for you. There's a ranch down the valley. When I phone my story in I'll have help sent up from Bellaire." He drew out pencil and paper. "Now tell me how badly each man is hurt and how it happened."

In less than a minute Curly had gleaned the salient details of the catastrophe. A fuel line had clogged, then another, and with only one of the motors running the heavy plane had been forced steadily downward. The ranch with its open fields had been too far away. The trees offered the only chance for a landing. The pilot, although painfully cut about the head, had managed, single-handed, to extricate the wounded men from the plane. He continued his first-aid treatments as he tersely related the details to Curly. One of the men was bleeding from a gash in the arm. The pilot prepared a hasty bandage.

"For God's sake, boy," the injured man implored, "get a doctor up here."

"I'll do everything I can," Curly promised as he took one last look at the wreckage.

"Hurry," the pilot pleaded as Curly staggered off in the direction of the ranch.

"I'll hurry," the determined youth replied between set teeth. His arm was numb now, but his whole side seemed to burn as he trotted off down the canyon. Once he stumbled and fell. He tried to protect the arm but it was twisted beneath him. He cried aloud in pain as he went down, and the world went black for an instant.

"You're through—you've had enough," a voice within him whispered. "Better to lie here and rest, somebody will be along to aid you soon."

"I won't," Curly sobbed aloud, "I won't. I'm going to make the ranch

and get my story in and get help."

It was not more than two miles to the ranch house, but to Curly it seemed a million. On and on he ran, clutching his shattered left arm with his right hand, so that it would not be wrenched back and forth. He was staggering, his lungs felt as though they were being torn at every gasp, his feet were weighted with lead. A mist began to form over his eyes. His spirit was unbeatable and unbeaten, but his body could stand no more. There was no question about it now. He was through.

Then, just as his legs were failing beneath him, a bend in the gully revealed the ranch house in the distance. How Curly reached the house he never knew. The rancher later told of being startled by "a wild-eyed, lurching fellow who came staggering into the yard yelling, 'Telephone—telephone—I want a telephone!' Then I saw he was hurt and I tried to make him lie down. He was plumb crazy—wanted to fight me. He saw the 'phone on the wall and made a jump for it."

Curly was at the telephone now. He had Travis on the wire.

"Curly," he shouted into the mouthpiece, "Curly talking. Get this quick—I can't last long. The *New Era* went down—" Swiftly and vividly he outlined the story of the disaster.

"**T**HEY need doctors and medicine," he concluded, "and they need them bad. That's about all there—" His voice trailed off.

"Hello! Hello!" Travis' voice grated through the receiver. Curly did not hear. He had slumped to the floor, his hand to his head.

A figure darkened the doorway. It was Brown. He merely glanced at Curly then, and seeing the telephone receiver dangling from the wall, ran to it. Travis' voice still spluttered questions over the wire. Brown recognized it.

"Hello—hello," he exclaimed. "This is Brown!"

"All right," Travis responded, "what have you got?"

"The *New Era* is down."

"Yes, I know it's down. What have you got that's new?"

"It landed in a clump of trees." That was more than the high-strung Travis could stand. Brown's eyes opened wide as he listened to his superior enunciate several phrases that are not to be found in the abridged edition of Webster.

"You lunkhead," the city editor stormed, "I suppose you'll tell me now that Columbus has landed and the Armistice is signed. Haven't you got anything that Ray didn't have?"

"Why, uh—no," Brown replied. "He, he—"

"He what?"

"Well, he jumped out of the plane with a parachute and got to the *New Era* first. I just landed."

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"I'll do everything I can," Curly promised as he took one last look at the wreckage.

"Hurry," the pilot pleaded as Curly staggered off in the direction of the ranch.

"I'll hurry," the determined youth replied between set teeth. His arm was numb now, but his whole side seemed to burn as he trotted off down the canyon. Once he stumbled and fell. He tried to protect the arm but it was twisted beneath him. He cried aloud in pain as he went down, and the world went black for an instant.

"You're through—you've had enough," a voice within him whispered. "Better to lie here and rest, somebody will be along to aid you soon."

"I won't," Curly sobbed aloud, "I won't. I'm going to make the ranch

and get my story in and get help."

It was not more than two miles to the ranch house, but to Curly it seemed a million. On and on he ran, clutching his shattered left arm with his right hand, so that it would not be wrenched back and forth. He was staggering, his lungs felt as though they were being torn at every gasp, his feet were weighted with lead. A mist began to form over his eyes. His spirit was unbeatable and unbeaten, but his body could stand no more. There was no question about it now. He was through.

Then, just as his legs were failing beneath him, a bend in the gully revealed the ranch house in the distance. How Curly reached the house he never knew. The rancher later told of being startled by "a wild-eyed, lurching fellow who came staggering into the yard yelling, 'Telephone—telephone—I want a telephone!' Then I saw he was hurt and I tried to make him lie down. He was plumb crazy—wanted to fight me. He saw the 'phone on the wall and made a jump for it."

Curly was at the telephone now. He had Travis on the wire.

"Curly," he shouted into the mouthpiece, "Curly talking. Get this quick—I can't last long. The *New Era* went down—" Swiftly and vividly he outlined the story of the disaster.

"**T**HEY need doctors and medicine," he concluded, "and they need them bad. That's about all there—" His voice trailed off.

"Hello! Hello!" Travis' voice grated through the receiver. Curly did not hear. He had slumped to the floor, his hand to his head.

A figure darkened the doorway. It was Brown. He merely glanced at Curly then, and seeing the telephone receiver dangling from the wall, ran to it. Travis' voice still sputtered questions over the wire. Brown recognized it.

"Hello—hello," he exclaimed. "This is Brown!"

"All right," Travis responded, "what have you got?"

"The *New Era* is down."

"Yes, I know it's down. What have you got that's new?"

"It landed in a clump of trees." That was more than the high-strung Travis could stand. Brown's eyes opened wide as he listened to his superior enunciate several phrases that are not to be found in the abridged edition of Webster.

"You lunthead," the city editor stormed, "I suppose you'll tell me now that Columbus has landed and the Armistice is signed. Haven't you got anything that Ray didn't have?"

"Why, uh—no," Brown replied. "He, he—"

"He what?"

"Well, he jumped out of the plane with a parachute and got to the *New Era* first. I just landed."

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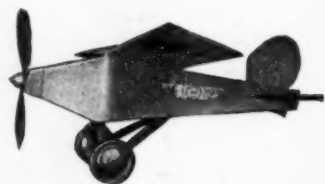
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"And you haven't anything new?"

"No."

"Then get something!" The force with which Travis banged up the receiver made Brown's ears ring.

Muttering an oath, Brown flung himself out the doorway, only to collide with the panting and disheveled figure of Rummel who had come running up the path from the field where his plane had landed.

"Come on," the *Journal* man shouted in Brown's face, "let's get up to the *New Era* and get the story."

"Why trouble," Brown answered with mock indifference. "Just buy a final edition of the *Bulletin* tonight and read it. It's on the press now."

"What do you mean?" the other ejaculated. Brown motioned toward Curly.

"The kid here jumped out of the plane and got it."

Curly still kept his hold on the notes he had scribbled beside the wrecked plane. Rummel saw them and guessed at their contents. He saw too that Curly, as the rancher worked over him, was practically helpless.

RUMMEL was desperate. No matter if the notes were not his, he had to have them. With a quick grab he snatched them from Curly's fingers. In a moment he had his city editor on the wire.

"Here's the dope," he said, "Listen!" The city editor listened. What he heard sounded more like a wreck in the making than the story of one.

With the last ounce of strength in his battered body Curly had staggered to his feet. He did not utter a word—words were beyond him now, but he acted.

To Rummel it seemed as though a clawing catamount had landed squarely on the middle of his back. The *Journal* man clutched at the telephone box for support as he swayed at the impact. The weight of the two men was too great for the ancient screws that held the box to the wall, and Curly, Rummel and the telephone clattered to the floor in a heap. Then, as far as Curly was concerned, the lights of the universe went out and stayed out.

He was unconscious when he was lifted into the plane that took him back to the city. He was still unconscious when the plane swooped down on the Brighton field to transfer him to a waiting ambulance.

He had been asleep for ages, it seemed, when he finally opened his eyes. His head was swimming. His arm, somehow, had stopped hurting, even stopped feeling. He moved his

head around slowly to gaze at his arm, swathed in bandages and propped up on a boardlike contraption. There was a strong odor of ether in the room. A figure sat beside the bed, a figure that sat for a long time silently regarding the boy. Curly's head began to clear. He was conscious of the room and the man! It was Travis.

"Hello," he said weakly. Then he tried to smile.

"Hello, yourself, you plumb idiot." Travis' voice was gruff but a twinkle in his eye belied his words. "How do you feel?" he asked.

"I'm all right."

"All right, are you! You're lucky you're not dead. Do you know what you've done?" Travis' voice was rising to a demonstrative pitch. "Look. I'll show you what you've done," and the city editor reached for a bundle of papers. He held them up in front of Curly. One of them was the final edition of the *Bulletin*. A banner headline was emblazoned across the top of the front page.

"Two Killed As *New Era* Crashes", it read, and down the two right hand columns of the sheet, in bold face type, was a running account of the disaster. The other paper was the *Journal*. There were no banners, no black type; only a small item, without details.

"IT'S one of the biggest scoops the *Bulletin* ever put across," Travis said with vehemence. "And do you see this?" His finger indicated the by-line on the *Bulletin* story. "By Raymond Lawrence, *Bulletin* Staff Writer", the line read. Curly was incredulous.

"Staff writer?" he asked unbelievably.

"Yes, staff writer." Travis was like a little boy in his enjoyment of Curly's wonder. "I've got to go now and let you rest," he said. "I just dropped in to see if you were all right. But—hurry up and get well. There's a staff job waiting for you the day you get back to the office."

Curly thought he must be dreaming. "Sure you don't think I'm too young?" He smiled at Travis.

"Too young!" Travis exploded. "Say, boy, there isn't a veteran newspaperman in this country that wouldn't give his right hand to have been able to do the job you did. And there wasn't one who could have done it better. No, sir—don't ever let anybody tell you you're too young."

"I won't," said Curly. "Not even a city editor."

Travis was chuckling to himself as he went out.

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